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CALIFORNIA PSYCHOLOGICAL INVENTORY PERSONALITY
CHARACTERISTICS OF MOTHERS OF ANTISOCIAL ADOLESCENTS

BY

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ABSTRACT

This study in clinical psychology attempted to obtain experimental evidence as to whether mothers of antisocial adolescents could, as a group, be differentiated with regard to their personality characteristics from mothers of adolescents not involved in antisocial activities. These characteristics were measured by the California Psychological Inventory. It was intended to see whether these differentiations could be positively and significantly identified with respect to selected traits.

For the purpose of this study the existence of two distinct forms of behavior were necessary for inclusion in the experimental group, i.e., that of lying and stealing in the case of male children and heterosexual activity as the presenting problem for the female children. These two types of antisocial behavior were chosen for study because they were the most frequent presenting problems. The group was very rigidly selected with the hope that by excluding many environmental factors the contribution of maternal characteristics would be maximized. In order to obtain an objective measurement of the personality characteristics of the participating mothers, the California Psychological Inventory (CPI) was administered.

Justification for the study of the mothers of antisocial children was based upon the view that the personality of the mother is a contributive factor in the formation of the child's attitudes, ideals and methods of reaction to stress and to life situations in

general. Three hypotheses were offered:

1. The CPI would discriminate significantly between the mothers of antisocial adolescents and the mothers of children who were not antisocial. The difference would be shown in the generally lowered mean scores exhibited on the various scales by the first mentioned group.

2. The CPI would discriminate significantly between the mothers of antisocial male adolescents and the mothers of antisocial female adolescents.

3. That the mean scores on the CPI for the mothers of delinquent adolescents would be significantly lower than the mean scores of the mothers of non-delinquents on the following specific scales: Do, Wb, Sa, Re, So, To, Ai, Ie, and Fx; and significantly higher on the Sc, Ac and Fe.¹

The original sample consisted of 74 boys and girls in Edmonton and 28 in Calgary, who had been presented as behavior problems to the Guidance Clinics of both cities. Of this group, 30 eventually made up the experimental group composed of the mothers of 12 antisocial girls and 18 antisocial boys. A control group was deemed necessary for a study of this type so ladies church groups were contacted and performed this function. The criterion for participation in the control group was that they must have children in the adolescent age range, who were not antisocial

¹ See Appendix "B".

and were presumed to be of average mental ability on the basis of their present grade in school.

A match between the experimental group and the control group was made on the basis of sex of child and an attempt was made to match the age of mothers and children as close as possible.

Means, standard deviations, point biserial correlations, and "t" test ratios as measures for significance of difference were calculated on all 18 scales for the primary experimental group and the control group as well as the group of mothers of male antisocial adolescents compared with the mothers of female antisocial adolescents. On the basis of chi square tests of significance the two groups were accepted as being comparable on the factors considered relevant to the study.

Hypotheses, I and III, concerned with the comparison of the antisocial group with the non-antisocial group had to be rejected on the basis of the present findings. Some support was obtained for the second hypothesis concerned with the differentiation between mothers of male from mothers of female antisocial adolescents. The results indicated that there seemed to be more factors common to the group of mothers with antisocial daughters than to the group of mothers with antisocial sons.

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CHAPTER I

INTRODUCTION.

Clarification of Terminology:

The early recognition and preventive treatment of adolescent antisocial activity are problems faced by most modern-day communities. It may be said that social scientists have been applying themselves with increasing seriousness to this problem in the last fifty years. Considering the many disciplines involved a major theoretical problem arises: each discipline in putting forward its own theoretical formulations has contributed a uniqueness that has not always allowed an easy theoretical integration and consequently the worker in this field must adopt an eclectic point of view or remain unfortunately one sided. Without a theoretical integration the problem divides itself into semantics and generally confused communication amongst schools.

In consequence of the above it becomes necessary to clarify terms at the very outset. This clarification may involve careful definition, and further, the occasional creation of new terms. While the latter is often regrettable and will be resorted to more out of desperation than intention, a few new terms will need to be introduced. The most immediate problem in this connection is in the use of the term juvenile delinquent. Herbert and Jarvis (1961, p.10) state: "...a delinquent is a person, of whatever age, whose attitude to other individuals, to the community, to lawful authority, is such that it may lead him into breaking the law, if it has not already done so." It may be said that

this definition is representative of the socio-legal position. Other writers use the term in referring to the young offender, but where the offence is not so serious as to be designated crime. Healy and Bronner (1936), for example, define delinquency as a violation of the law by a person between the ages of seven and sixteen and consider it to be a precursor to adult crime.

The juvenile delinquent as defined in the Criminal Code of Canada¹ is as follows:

" 'juvenile delinquent' means any child who violates any provision of the Criminal Code or of any Dominion or Provincial Statute; of any by-law or ordinance of any municipality, or who is guilty of sexual immorality or any similar form of vice, or who is liable by reason of any other act to be committed to an industrial school or juvenile reformatory under the provision of any Dominion or Provincial Statute;" (p. 646).

In the above, "child" means:

"...any boy or girl apparently or actually under the age of 16 years: Provided, that in any province or provinces or to which the Governor in Council by proclamation has directed or may hereafter direct, child means any boy or girl apparently or actually under the age of 18 years; Provided further, that any such proclamation may apply either to boys only or to girls only or to both boys and girls." (p. 645).

¹ Juvenile Delinquents Act, Revised Statutes of Canada 1952. Ch. 160. Sec. 2, Sub-Sec. 1, Subsub-Section H.

It is interesting to note that this definition though considered 'revised' in 1952, is identical with the original 1929 definition. (Popple 1939; 1953-1954).

It is the contention of the present author that the term "juvenile delinquent" should be used in the courtroom, as defined legally, and that social scientists concerned with the diagnosis, etiology and treatment should, except when discussing the legal implications of a specific offender's behavior pattern, concentrate upon the behavior involved and use terminology that relates more to the behavior dynamics. The category "juvenile delinquency" has only legal and moral meaning and is of little value in understanding behavior pathology or in instituting methods of treatment (Peck and Bellsmith, 1954), and has little importance to the social scientist as an indication of conflict or symptom of maladjustment. (Merrill, 1947).

In place of the term "juvenile Delinquent" the present author intends to use hereafter the term "antisocial adolescent" unless specific reference must be made to the legal implications of the behavior of any particular adolescent. It readily becomes apparent that while a "juvenile delinquent" is also an "antisocial adolescent", an "antisocial adolescent" is not always correctly described as a "juvenile delinquent". In clarification of this point it must be explained that to be classed as a juvenile delinquent, one must appear before a court of law and be convicted of an action contrary to the Criminal Code of Canada. Whereas, to be called an antisocial adolescent one must be within the "teenage" category and to have exhibited behavior contrary to wishes, dictates, morals, mores etc. of the particular society of which one is a member. Another strong argument supporting the use of the term antisocial adolescent is that by this

means one can overcome the legal difficulty encountered by International inconsistency in the definitions of juvenile delinquency as is evidenced in the United Nations report by Cama (1953), in which it is noted that the only real communality of the law exists in that the term embraces the non-adult offender. It is felt to be particularly significant that the type of adolescent under consideration here has been the subject of United Nations concern (1955, p.2), but has been described as a "pre-delinquent". The term pre-delinquent is defined as:

" a person below a specified age, ... who has not committed any act regarded as a criminal offense by the laws of his country, but who may ... be regarded as antisocial, ... in such a degree or form as is likely to result in his becoming overtly delinquent if not subjected to some kind of preventive treatment."

Locale of the Study:

The Provincial Guidance Clinics^I of Alberta are a psychiatrically oriented public health service, part of the Mental Health Division of the Department of Public Health, offered to the people of Alberta free of charge by the Provincial Government of Alberta. There are permanently established full time Clinics at Edmonton, Calgary, Lethbridge, and Grande Prairie, as well as part time Clinics at Ponoka, Red Deer, and Medicine Hat. From these centers the

^I Hereafter, P.G.C.

service is extended to many other points throughout the province. The Clinic consists of working teams made up of representatives of three different professions; a psychiatrist, a psychologist, and a social worker. The purpose of the Clinic is two-fold in that it serves as a consultative and referral agency as well as a treatment center for children. There are three major types of problems dealt with at the Clinic and these are: (a) emotional and behavioral problems; (b) educational problems; and (c) problems of intellectual inadequacy. Of special interest to this study is the first-mentioned group which includes those children exhibiting antisocial trends of the type being studied in this project. In the year 1961, at the Clinic in Edmonton, 1993 new cases were seen of which 6.67% were because of antisocial activities. Likewise, in 1962, when 2073 new cases were seen, 4.70% were referred because of antisocial activities. Therefore over the two years a total of 95 boys and 61 girls, to make up a total of 156, up to the age of 18 years and 11 months were seen for reasons of antisocial trends.¹

Importance of the Problem:

Numerical consideration of the types of new cases seen leads quickly to the conclusion that the problem does not seem to be one of increasing severity; as present day percentage figures approximate those of earlier dates.² While in the numbers alone the antisocial

¹ These data were secured from the recapitulation sheets used to prepare the annual report.

² These statistics, on record at the Provincial Guidance Clinic (Edmonton), are available for inspection.

type may not appear a pressing problem, the cost to the taxpayer has been rising. One need only consider the amount of money, goods, and cars stolen by the boys included in this study to achieve an indication of the cost. Any estimate made on the basis of reported numbers of cars stolen and wrecked as well as goods and money stolen must be a conservative one since it is based upon the reports of the offenders themselves. For example, in the case of one boy involved in the theft of money from his parents, from neighbours and from stores, a reported total of \$1,656.00 was substantiated by the police authorities. The average amount of money stolen was less than this but a reliable index is impossible to obtain since the majority of cases were not substantiated by authoritative sources.

When the present author was searching the register of cases seen at the Edmonton Clinic it was found that the majority of those boys, described as antisocial were so diagnosed because of stealing. In the case of girls so described the reason was for illicit heterosexual activity. This discovery led to two questions which are perhaps central to this undertaking. The first; Is there any familial dynamic common to these two conditions? The second; Can it be that the personality of the mother is a significant etiological factor?

When literature was surveyed, it became apparent that there had been many attempts made to explain the causes of delinquency, (Cohen 1955), but little had been done in the way of personality evaluation of parents of delinquent children by means of psychological tests. There appeared to be two main types of theories developed to attempt to explain

delinquency and these were the "psychogenic" and the "sociogenic". Neither type appeared to be all-inclusive in it's explanation, both stating that certain types of delinquents do not fit into their thoery and may be explained by the other theory. The present author used these theories to some extent in developing his experimental group criterion.

Parental Influence:

Many researchers and persons involved in dealing with antisocial youngsters lend support to the author's belief that the parental influence is of major importance in the development of the antisocial adolescent. (Spaulding, 1932; Matthews, 1937; Wallenstein, 1938; Waggoner and Boyd, 1941; Adam, 1946; Porter, 1954, and 1955; Ausubel, 1958; Ferriera, 1960; Knight, 1960; Suttie, 1960.) Perhaps Porter's (1954, 1955), conclusions drawn after his studies of 100 parents of school age children are most representative of prevailing thought with regard to the parental contributions in the formation of children's personalities:

"Psychologists, sociologists, psychiatrists, and others who have studied family life and human behavior are in agreement that the subtle, difficult-to-measure psychological elements of the most interpersonal environment are among the most influential factors operating to influence the personality development of children living in the family. Of all the family relationships which

influence the child, the parent-child relationship is probably the most significant in its effect.

Parental acceptance of children is ... one of the essential elements underlying the whole structure of the parent-child relationship. The child's needs, to feel secure ..., to feel ... a valued member of the family group ... his own special place in it Child Guidance Workers usually find that 'problem children ' have 'problem parents' ... (and) studies of juvenile delinquents almost unanimously agree on the importance of the home in determining whether or not the child will be a juvenile delinquent. (1955 p. 157).

The well known biographical study of 200 delinquent boys, with the emphasis upon somatotypes, carried out by Sheldon, Hartl, and McDermott (1949), provides some constitutional support of the view that parental influence upon the development of juvenile delinquent children is strong. The generalization would be that like tends to produce like. These authors, however, somewhat qualify their position of genetic influence by concluding that delinquency is never an either-or phenomenon but that all of their reported scales or quantifications are good only with reference to the "time-place-person-and-circumstances of their origin. This study suggests that while like begets like the emphasis should not be altogether upon the inherited constitutional aspects but upon the continued interaction between the similar personalities.

In making the decision to focus the study upon the mothers of the children, two major factors were considered; (a) the availability, and (b) the mother is usually the individual who cares for the child during the early years. To further justify this concentration it was noted that in 35% of the original cases the fathers were deceased or not living with the family by reason of divorce or separation. A further consideration is that mothers are usually considered to be the primary source of information about the illness or behavior of the child. The work of Levitt (1959), in which mothers and children completed the Children's Manifest Anxiety Scale, revealed great similarity in scores. This finding suggests a greater awareness of the child's problems on the part of the mother.

More specific support for the study of the personality characteristics of the mothers of the delinquent children is obtained from research dealing with parental acceptance of their children, effects of broken homes, unwed mothers, parental identification with the children and articles on delinquency in children per se.^I The view underlying this study is that the mothers personality is influential in the social development of the child and that where the former is less than adequate the latter will suffer mal-development.

The Hypotheses:

This study was undertaken to investigate the personality

^I See Chapter II

characteristics of mothers of antisocial adolescent children seen at the P.G.C. Assessment of personality was accomplished by means of a standardized psychological test: The California Psychological Inventory.¹

It was hypothesized that:

- I The CPI would discriminate significantly between the mothers of antisocial adolescents and the mothers of children who are not antisocial. The difference would be shown in the generally lowered mean scores exhibited on the various scales by the first mentioned group.
- II The CPI would discriminate significantly between the mothers of antisocial male adolescents and the mothers of antisocial female adolescents.
- III There would be specific scales in all the classes that would significantly discriminate between the mothers of non-antisocial adolescents and the mothers of antisocial adolescents. It was predicted that in the experimental group as compared to the control group mothers:
 - (a) in Class I, the scales Do (Dominance), Wb (Sense of Well Being) and Sa (Self Acceptance) would be lowered,
 - (b) in Class II, the scales Re (Responsibility), So (Socialization), and Sc (Self-control) would be raised,

¹ Hereafter, CPI See Appendix "A".

- (c) in Class III , the scales Ai (Achievement via Independence) and Ie (Intellectual efficiency) will be lowered while Ac (Achievement via conformance) would be raised,
- (d) in Class IV, the scales Fx (Flexibility) will be lowered, and Fe (Femininity) would be raised.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction:

In the hope of obtaining further justification for the present study and, as well, to avoid duplication of effort a survey of the literature was made. While a good many authors appear to support the idea that the maternal influence upon the development of childhood behavior disorders is probably considerable, there does not appear to have been any research work done along the lines intended in the present study: and that is, the psychometric assessment of the personality characteristics of the mothers of antisocial adolescents. It was therefore necessary to expand the scope of the search to include studies, research projects, and theoretical discussions concerned with the assessment of the characteristics of juvenile delinquents. This widening of the scope produced with it a great diversity of opinion with regard to the etiology and methods of treatment of delinquent children which perhaps was best outlined by Cohen (1955). It soon became evident that an exhaustive search of the literature dealing with the topic of juvenile delinquency, its etiology, treatment and prevention would not have relevancy within the scope of this present undertaking. Thus, a sample of those aspects is all that can be presented. In order to deal with this problem it was decided to focus upon four main points:

- (1) General studies of the maternal influence upon the personality development of children.

- (2) Theoretical viewpoints subsumed under the broad headings of psychogenic and sociogenic theories.
- (3) Specific studies dealing with psychometric assessment of mothers of antisocial adolescents.
- (4) Specific relevance of the CPI to the study of the personality of mothers of antisocial adolescents.

General Studies Concerned With Maternal Influence:

Following a study of 133 families containing 153 delinquents composed of 130 boys and 23 girls, adjudged so for a mixture of offenses, Healy and Bronner (1936), concluded that no less than 91% of the delinquents provided evidence of being unhappy and discontented in their life circumstances in comparison to only 13% of the controls having the same complaints. It was noted that 46 out of 96 of the delinquents felt keenly rejected, deprived and insecure as well as expressed real or fancied inadequacies and inferiorities in their home life. The authors further pointed out that 30% of the mothers were "judged" by social workers and psychiatrists to have "poor emotional control". It was more-or-less concluded that delinquency was a result of reaction tendencies, established early in life within the family setting.

Mathews (1937) made use of teachers' judgements in boys in grades 7 to 11 of overt expression of socially undesirable behavior upon 93 to support the generalization that sympathy, harmony and mutual confidence between the boys and their parents were related to the sons' expression

of socially desirable behavior. One of the very real problems which is encountered in this type of an undertaking was revealed by this study; that is, the difficulty encountered in determining which factors are causal and which are resultant.

A study which has more specific relevance to the present undertaking was that of Waggoner and Boyd (1941) dealing with the aberrant sexual behavior of 25 juvenile cases. Realizing that sexual curiosity and sex-play are not uncommon in childhood only those children who had adopted aberrant practices as regular and preferred patterns were included for study. The authors reported that in every case they were able to detect some type of unhealthy and unfavorable parent-child relationship. Some parents for example, created a turbulent and unhealthy environment because of their own aberrations. Others thoroughly rejected their children. A number were well-meaning but ill-advised in that they established a too intimate relationship between the child and themselves.

Bowlby (1947) provides perhaps the greatest theoretical support of maternal influence upon delinquents in his study of 44 juvenile thieves seen in a London Guidance Clinic during the years of 1936 to 1939. The conclusion drawn was that there seemed to be a very significant mother-child relationship. More specifically it was indicated that the unnecessary interferences and frustrations put upon the child by a mother described as being irritable, critical, and nagging tended to result in excessive anger and aggression in the child. The

frustration was thought to increase greed for affection and for symbols of that affection apparently not derivable from the mother. Out of this, Bowlby hypothesized, that aggression and greed could be pathologically stimulated in early childhood and that the antisocial impulses would be directed against the frustrating and irritating mother. This would set up a vicious circle involving the mother being hostile to the child, the child expressing aggression towards the mother, justifying further the mothers' irritation and anger.

Karpman (1952), integrating and discussing the opinions expressed in a symposium on the psychodynamics of child delinquency, provided support for the contextual relationship between stealing and sexual promiscuity, the forms of adolescent rebellion considered in the present study. While the theoretical position though widely diversified there appears to be a considerable coincidence of view. It was consistently pointed out that there were disturbances and fixations at the oral level in the boys studied and that they seemed to have insatiable wishes demanding immediate satisfaction. In the six cases presented of the boys who stole, four types of psychopathological family situations were outlined; a masculine mother with a weak father, a mother neurotically narcissistic and a tyrannical father, and families with one or the other parent missing, all having in common the fact that the deepest identifications took place with the mother. It was hypothesized that stealing in these cases, was an expression of unresolved bisexual wishes and the stealing was a symptom of autoerotic activity. Karpman's (1952) symposium also reported a larger study by J. Lander, of 114 mothers of

delinquent boys in which 55 showed evidence of maternal rejection and 20 of these were at a prenatal level. The child's typical reaction to rejection was increased anxiety and insecurity making for destructive aggression and hate. The children as a group lacked motivation for giving up the pleasure of aggressive wishes and the need to punish the depriving outside world.

In work not specifically dealing with delinquency Porter, (1954, 1955), and Hawkes, Burchinal, Gardner and Porter (1956) studying 100 families used the questionnaire method for measuring parental acceptance of their children. The mean acceptance score of the mothers was significantly higher than the father's mean, a relationship thought to be within expectation in view of the traditional cultural conditioning which women receive in our society concerning their attitudes toward marriage and child-rearing. Though the authors did not relate their study in any way to the effects of lack of parental acceptance upon children one could hypothesize that since the mother's acceptance was more significant its loss or absence will also be more significant in the development of the personality of the child. Hawkes, Burchinal, and Gardner (1956) conducted a follow-up study relating marital satisfaction, personality characteristics, and parental acceptance of children in 204 families using the Burgess-Wallen Marriage Success Indexes and the Thurstone Personality Inventory. They found only slight relationships existing between the personality and parental acceptance scores as a whole but the analysis of the mothers' scores

yielded significant relationships. Those authors felt that there was reason to believe that acceptance of children may exist apart from a satisfactory marital adjustment. A mother or a father who failed to find psychological satisfaction in their marital relationship may actually turn to the child for the warmth and understanding perceived as lacking in the spouse.

Burchinal (1958a) continued the study of parental acceptance by means of the Porter Acceptance Scale and found no measurable relationship between the adjustment characteristics of the children and the child training and care attitudes of their parents. He concluded however, that the non-significant nature of the findings may be due to inadequate measurements or may really be a lack of relationship between parental acceptance and adjustment of children. He then conducted a further study (1958 b) in which the scores of the parents were classified by the sex of their children. He discovered that while there was no evidence that parents were more accepting of children of one sex as opposed to the other, there was support to the idea that mothers were more accepting of children in general than fathers, though younger and less well-educated mothers may not be as acceptant as those more mature.

Abbe (1958), in a study comparing the attitudes of mothers to their children's behavior and the relationship to the diagnostic category of the child by using the social workers', psychiatrists' and therapists' judgements, provided contrary evidence to the present author's basic underlying assumptions. Abbe noted that the majority

of literature and studies examined suggested that:

- "(a) child adjustment and parental standards and behavior are related;
- (b) overindulgence, severity, submissiveness, and dominance of parents affect children's adjustment; and
- (c) emotional security at home is an important factor in the satisfactory adjustment of the child". (p.170).

On the basis of his work, Abbe felt that he could not conclude that there was any relationship between a particular kind of maternal attitude and any specific emotional disorder in the child. However, this conclusion was qualified with the assumption that the assessment of the mother's attitude at any given point in time would not necessarily be an adequate measure of her attitudes at the critical developmental periods in the child's life. While Abbe's conclusions would seem to contradict some existing views the present author's contention that while the mother's attitudes may be subject to changes in time the personality per se will be relatively stable.

The analysis of the relationship of broken homes and needs of adolescents was undertaken by Bartlett and Horrocks (1958) by means of a factor-analytic study of the Horrocks-Lucas Needs Questionnaire as answered by 44 adolescents having one parent deceased. Eight factors emerged of which factor A; heterosexual striving vs. satisfaction from parents is the most relevant to the present work. It was felt that this factor indicated that the adolescents having only one parent tended to receive less recognition and affection from adults and, in order to

compensate for this lack, they seemed to be striving for attention from the opposite sex.

Clothier (1961) supported the concepts of Bartlett and Horrocks (1958), as outlined above, in her study of unmarried mothers. She concluded that the adolescent who has not experienced the giving and taking relationship of love with the parents or who has received only casual interest on the part of substitute parents tends to misinterpret the attention of boys as love. The most disturbed adolescents are those who have been deprived of their parent's love but specifically the mother's love, and through this the satisfying mother-daughter tie which is necessary for control and for direction of sexual urges toward later marriage and family life.

McCord, McCord and Howard (1961), in a study of the parents of 174 aggressive boys by means of judgements based upon psychiatric, psychological and social work consultations, found that 95% of the aggressive boys were raised in a home with at least one rejecting parent. They defined the term aggression as, "...those acts which objectively hurt or injured someone". This conception is similar to Sears, Maccoby and Levin (1957), in the definition they offered: "... behavior intended to hurt or injure somebody". The McCord study further obtained a rating of the mother's control over the child and found that the aggressive boys tended to be either overcontrolled (40%) or subnormally controlled (44%) by their mothers. The general conclusions were made that paternal aggression did not significantly heighten the son's aggression; that the specific religious affiliation

of the family did not significantly affect the level of the boy's aggression, and that aggressive boys were most likely to be raised by parents who, (a) were rejecting, (b) failed to impose direct controls upon behavior, (c) offered an example of deviance and, (d) were themselves often involved in conflict.

Sears (1957) and his colleagues, similarly found that aggression in childhood was associated with the use of physical punishment, low esteem of the mother for the father, a high degree of permissiveness with regard to the expression of aggression, disagreement between parents and a general maternal dissatisfaction for her role in life.

The Gluecks (1950) and Bandura and Walters (1959) found that the aggressively antisocial person was the product of an environment characterized by parental rejection, familial discord, severely punitive discipline and delinquent parental inconsistency. The Gluecks, following their study of 500 boys aged 11 to 18 years, paired with non-delinquents, stated that 24.4% of the mothers of delinquents as compared with 15.2% of those with non-delinquents showed "clear evidence" of being overprotective. In addition they found that 21.2% as compared with 3.4% were indifferent and 6.7% to 1% were openly hostile and rejective. Bandura and Walters (1959) in a smaller study of 52 adolescent boys, (26 with aggressive, antisocial histories and 26 boys composing a control group) using interview techniques with parents, came to similar conclusions as the Gluecks with regard to the characteristics of the parents of aggressive, antisocial boys.

Theoretical Viewpoints on the Etiology of Juvenile Delinquency.

Rather than become involved in the nature-nurture controversy it seems wise to present representative viewpoints some of which may appear opposed but not mutually exclusive. Following this, some attempt will be made to achieve a synthesis. A careful study of the problem of delinquency reveals a multitude of factors: social, educational and personal. All of these may contribute in some degree to the deviant behavior. Indeed it is possible to enumerate such a number and variety of causative factors that it becomes a problem to achieve etiological understanding. Abrahamsen (1960, p.22) following a discussion of this problem has commented:

"...the etiological factors causing crime and delinquency are emotional and social disorganization of the individual. Yet why does one person, who seemingly is exposed to the same factors as another, become criminal, and the other does not? Therefore ... not everyone becomes a criminal in spite of the fact he may be living in what is considered a criminal climate. On the other hand we see a person becoming antisocial ... in spite of his having lived in good surroundings, those conducive to social conduct."

That author concluded that antisocial behavior must be considered a function of at least several factors: The constitutional, the predispositional, the precipitational, the psychological, and the physical, all of which may or may not need to be present for the expression of antisocial activity. Burt (1945) was perhaps one of the first to become

dissatisfied with the single cause as an explanation of criminality and evolved a "theory of multiple causation." He recorded in every instance the weaknesses of a personality makeup as well as unfavorable environment in a study of juvenile delinquency in London.

Before continuing, a brief consideration must be made of the tendency of statistics on juvenile delinquency to be misleading. Kanner (1948), Cohen (1955), and Weaver (1959), all point out that since "juvenile delinquency" is technically a legal concept and, as such, the statistics concerning this term are usually limited to the acts which have been brought before the courts, the children's physical condition at the time of arraignment and sometimes their intelligence quotients, area of habitation, and gross family structure are included. The dynamic etiological factors are not accessible to this type of statistical treatment. Almost all statistical analysis of juvenile delinquency seem to portray delinquency in general as a working-class phenomenon. It is conceivable that this correlation is a statistical artefact produced by the biases of the police and courts since there are generally more policemen per capita on patrol in the lower-class districts and secondly, adolescents from upper-class who become involved in anti-social activities are dealt with by other agencies.

Nevertheless, the available statistics on the prevalence of male and female delinquency do provide interesting comparisons. Cohen (1955) and Weaver (1959) relate that practically all published figures agree that male delinquency is at least four times as common as female delinquency. Cohen feels that it is probable that some types of

offenses when committed by girls are less likely to be referred to the police and the courts and therefore do not find their way into official statistics. The majority of female delinquencies, although appearing on the records as "running-away" or "ungovernability" is mostly sex delinquency. Weaver (1959), in attempting an explanation of the 4 to 1 male-female ratio, believed that it was not sufficient to say that females were equally disturbed but more clever in eluding the police, or that they were kept at home to help with the housework. In theorizing he offered that delinquency was a function of "greater difficulty in sex-identification" for males. In order to become independent "selves", males must become independent from the mother who has been the closest to them while the girls may remain identified with the mothers and thus not experience the "psychic parturition". Delinquency in males is thus related to the constant striving for independence and the hostility related to the weaning from their mothers.

Before continuing with a discussion of the psychogenic, specifically, the psychoanalytic, and the sociogenic theories of delinquency it seems pertinent to review the modern exponents of the traditional "positive school" developed by Becarria, Lombroso, Ferri and Garofalo, who initially held that criminals were characterized by physical anomalies. These theories later included in their views the rather more psychological qualities such as, for example, deficiencies in "pity" or in "probity". Although these notions are not taken seriously by everyone, these early theorists probably made the worthwhile

contribution of recentering the interest of researchers from the criminal act to the criminal person. Their ideas, though specifically relating to adult offenders, have come to provide a background for modern theories relating to both adult and juvenile social deviations.¹

Modern constitutional-type theories vary in details but, generally, they all assume that there are measurable biological differences between criminals and non-criminals and that physical structure determine the nature of behavior. Most recently Sheldon, Hartl, and McDermott (1949), Glueck and Glueck (1950, 1956), revived interest in the measurement of the physical traits of delinquents. Sheldon's group studied 200 delinquent boys classifying them as to "somato-type" and came to the conclusion that delinquents are chiefly "mesomorphic" in body type; that is, they are solid and muscular, having thick necks, broad shoulders, and tapering torsos. Sutherland and Cressey (1955, p. 105), criticized Sheldon's theories saying that "his data did not justify his conclusions that the delinquents were different from non-delinquents in general, or that the differences, if they exist indicate (constitutional psychopathic) inferiority, or that the inferiority if it exists is inherited." It is worth questioning these findings since there is sufficient evidence that mesomorphs turn to other activities than crime, however, it is a reasonable argument that the mesomorphy well prepares the individual for crime, especially crime of the more "athletic" or muscular variety. The question might be asked

¹ See Neumeyer (1961) whose writings form the basis for this statement.

as to whether the mesomorphy in the delinquent develops out of the athletic activities and interest in body stature of the delinquent group or is predispositional for delinquency.

The Gluecks' (1950, 1956) theorizing, while still focusing upon constitutional factors seems more tenable as the basic theoretical assumptions are rooted in multiple-causation. In a study comparing 500 delinquents with 500 non-delinquents the Gluecks found that 60.1% of the delinquents were predominantly mesomorphic as compared with 30.7% of the non-delinquents. While they do not subscribe to the physical-type theory of delinquency, their findings indicate a close relationship between physique and delinquency. It must be remembered however, that the existence of a relationship between two factors does not necessarily indicate cause and effect.

Following Berman (1932) a variety of glandular theories of crime have been advanced. Curie (cited by Karpman 1953, 1959) after defining homosexuality as a delinquent act, went on to provide evidence for a causal theory involving gonadal dysfunction. He reported successful treatment of this disorder by androgen hormone therapy. The use of hormone therapy upon other varieties of delinquency remains a question.

There are also many studies (Mathews, 1937; Capwell, 1945; Sheldon et al, 1949; Liddle, 1958 and the Gluecks', 1950, 1956) which report the delinquent to be duller or less intelligent than non-delinquent adolescents. The results of these works remain somewhat

unconvincing. Rogers (1962) provides an insight as to possible reasons for the apparent retardation of the delinquent group when he points out that where parents are classed as being rejectant, their children show decelerated intellectual development, relatively poor usage of the abilities they possess and general lack of originality. Though the notion of mental deficiency as being a cause of delinquency is being questioned, the factor of low intelligence cannot be ruled out as playing an important contributory role in individual cases.

It is within expectancy that there would be some relationship between intellectual ability and the acquisition of social attributes. Sutherland (1955), formulated one of the most commonly known sociological theories of criminology based upon the assumption that delinquency is learned. His theory held nine propositions:

- "1. Criminal behavior is learned... 2. Criminal behavior is learned in association with other persons in a process of communication... 3. The principal part of the learning of criminal behavior occurs within intimate personal groups... 4. When criminal behavior is learned the learning includes (a) techniques of committing the crime... (b) the specific direction of motives, drives, rationalization and attitudes... 5. The specific direction of motives and drives is learned from definitions of the legal codes as favorable and unfavorable... 6. A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law... 7. Differential associations may vary in frequency, duration,

priority, and intensity... 8. The process of learning criminal behavior by association with criminal and anti-criminal patterns involves all of the mechanisms that are involved in any other learning... 9. While criminal behavior is an expression of general needs and values, it is not explained by those general needs and values since non-criminal behavior is an expression of the same needs and values. (pp. 77-79)."

While the "differential association theory" provides an excellent summary of how delinquent acts may be learned, it is subject to the same criticism confronting all other sociological theories. Such views do not explain why some individuals with extensive contact with criminal norms and identification with criminals do not themselves become anti-social. Perhaps such a view does not place enough emphasis upon the personality characteristics of the individual. It is possible that these qualities in some way allow the individual to perceive situations differently from other persons and in this way to develop a selective environment with autistic values.

Franks (1961) provides an interesting but "speculative" theory regarding the differences between psychopaths and delinquents. The former are claimed to be more extroverted and as such difficult to condition. He feels that the "true" psychopath is asocial inasmuch as they are unable to learn the rules of society. Delinquents as a group are capable of learning these rules but, unfortunately have acquired rules which are regarded as undesirable and antisocial by the

majority of society. Franks believes that these delinquents could be detected by their tendency to introversion and ease of conditioning in laboratory tests. With regard to the environment producing such individuals Franks hypothesizes that the delinquents would come from emotionally or materially undesirable environments, whereas the psychopaths, being indifferent to social learning could come from any sort of environment. As far as could be ascertained these hypotheses have not been tested: even so, they provide interesting material for speculation.

Bovet (1951) and Cohen (1955) provide a good survey of the sociogenic theories. What Cohen termed the "cultural transmission theory" seems to be identical with the earlier-mentioned differential association theory. The "social disorganization" and "cultural conflict" theories are favored by many individuals (Vedder, Koenig and Clark, 1955, et passim) who hold that delinquency is a product of ethnically heterogeneous, economically depressed, and highly mobile populations. The basic rationale behind these views is that the diverse ethnic and racial stocks have a great range of different standards, and codes which are inconsistent with those offered by the larger society as represented by the schools and other official institutions. This confused picture of conflicting mores is presented to the adolescent who receives no clear cut direction. Thus, he assimilates partially or unwisely, rebels against one side or the other, but usually that of the larger society since he gains support from his peer group which is undergoing the same experience. These theories are also related to that which is termed the "illicit means" theory; an individual who perceives others as having more than he has

and seeks to move upward. He encounters frustrations to lawful attempts at removing the feelings of deprivation and resorts to crime as a means of gaining the desired status level and it's material rewards. These theories are more of less specific to the first-generation population and the lower classes, and do not cope with delinquency committed by upper-class adolescents who have not the problems associated with recent immigration or economic inadequacy. In fairness to the exponents of these theories it must be pointed out that they are applied best to the "gang subculture" type of delinquent.

Clarke (1961), in a short paper describing a study of 500 delinquent boys passing through a Remand Home, provides a link between the sociologenic theories and those termed psychogenic. He noted that in the great majority of delinquents there appeared to be precipitating factors which he termed "stressor agents". The eight stressor agents having the greatest precipitative significance were: (1) bereavement of parent or sibling, (2) loss of relatives in other ways such as divorce or desertion, (3) parental illness with threat of death, (4) presence of new step-parents (most prevalent), (5) disruption of family life through economic strife, (6) change of environment by means of moving, (7) discovering of truth regarding illegitimacy and adoption, (8) brain damage. While stressor agents may prevail upon individuals who do not become antisocial, they are still perhaps significant in that they are perceived in a more threatening manner by the pre-delinquent or pre-antisocial individuals.

One theory that provides a common ground for agreement is that outlined by Kravaceus and Miller (1960), which takes the position that delinquency provides an outlet means for the satisfaction of at least one of adult society needs. The delinquent in this view is seen as "syphoning off" much of the aggression which is the consequence of the frustrations encountered in our complex modern society. All societies need institutionalized scapegoats to act as hostility targets. In wartime this role may be played by the enemy nation. In peace time with society experiencing stress both internally and externally, the irritating adolescent and annoying delinquent provide the adult with a valid target. It is through the medium of the press, radio, television, and movies that the image of the delinquent has been built up as a suitable object for adult criticism and hostility. Similarly this stereotype of the antisocial adolescent is reinforced by the same media providing the adolescent with a criminal model with which he can identify to withstand the rejecting adult society.

In adopting a more psychoanalytical approach and hence a psychogenic theory, Eissler (1949), and Knight (1960), apply the concept "scapegoating" to the family unit. Frequently, clinic studies indicate that the adolescent is used as a convenient scapegoat for the parents to act out forbidden antisocial impulses. The parents may find vicarious gratification of their own impulses in the amoral and antisocial behavior of their child and may unconsciously encourage this behavior. Such neurotic needs may exist in a parent because of some current inability to satisfy such urges in the adult world or because of some childhood

experience of their own which prevented satisfaction. The value of the scapegoat theory lies in the answer it can give to the troublesome question left unanswered by sociogenic theories. It is well known for example, that one member of a family can be delinquent and not others. The scapegoat theory would claim it is only necessary for one member of the family to be delinquent to provide the outlet.

Before discussing specific studies and theories of a psychogenic nature it seems necessary to outline what is encompassed by the term psychogenic. Psychogenic theories hold that delinquency is a result of some factor in the personality of the delinquent child that is either not possessed at all or not possessed to the same degree by the non-delinquent child. Especially such a view is held probably most favoring the psychoanalytic approach. For example, it is held that the individual is endowed with hedonistic instincts (Id) which seek gratification through learned forms of behavior (Ego) which are in keeping with the introjected standards (Superego) of the society in which he lives. The delinquent differs from the non-delinquent either by possessing unusually strong Id drives or faulty Ego or Superego development resulting in the expression of the Id drives as antisocial or asocial acts. This imbalance of psychic forces is attributed to faulty training and parental neglect (Cole, 1936). The Neo-Freudian school, speaks of the delinquent act as a symptom or method of handling some underlying problem of adjustment. According to this view, the delinquent differs from the non-delinquent in that his perceived frustrations, anxieties and deprivations, are presumed to be different in

type or degree. As expounded by Healy and Bronner (1936), his problem is thought to be related to disturbed family relationships and lack recognition of personality, opportunity for the realization of social adequacy, and thwarted development of independence. A general lack of love and absence of acceptance within the family or a lack of certainty about that love and acceptance within the family seem to be the common factors in such theories (Healy and Bronner, 1936; Bowlby, 1944; Bovet, 1951; and Ausubel, 1958). Thus it is insecurity or anxiety which lead to delinquency.

Cameron (1947) is able to be more specific and appears to give greatest influence to the development of the child's personality within its' relationship to the mother. The mother, he writes, "who gives him his basic ideals and standards of conduct and through her daily behavior toward him builds up his early patterns of expectancy in relation to his reception and treatment by persons outside the family (p. 33)". The rejected child and the child dealt with in an inconsistent manner are those who show a later high susceptibility to behavior disorders and delinquency. It is through inconsistency of parental handling that the superego formation is established in a fragmentary manner. There is not a generalized weakness as much as there is a lack of superego in particular area of behavior. This phenomenon has been termed "superego lacunae" by Johnson (Eissler, 1949, p. 225-45.).

Hawkes (1957) suggests that the common goal of both psychogenic

approaches is to understand what the relationship being experienced means to the individual. It is not the physical nature of the external stimulus which determines the reactions but rather the way in which the stimulus is apperceived, by the individual being stimulated.

Blos (1961) provides a somewhat different psychoanalytic explanation of the difference between delinquents and non-delinquents. He acknowledges that delinquency is a product of a dynamic interaction system between the individual and his environment and is related genetically to antecedents in earlier stages of development such as trauma, fixations, ego deformations and similar pathogenic malformations. In addition however, he hypothesizes that the major difference between those adolescents classed as delinquents and the non-delinquent lies in the fact that the former express in reality what the latter customarily express in fantasy. It is not the fantasies that are significant, but the fact that the delinquent has no inhibition preventing him from carrying these fantasies into actions. This absence of a restrictive force lying between fantasy and action is an ego problem. Thus there is thought to be an ego defect in the delinquent. In relating this to familial upbringing, Blos states that the ego's mastery of the environment belongs to the early phases of development which follow the gradual separation from the mother and identification with her. Blos feels that due to the lack of development of mutual trust and confidence there occurs a sadomasochistic bond between mother

and child and this is expressed in a battle for power. The delinquent, being unable to express directly towards his mother because of the still existing psychic dependency upon her, reacts against symbolic mothers and other authority figures. To Blos, there is an enormous hostile dependency upon the mother.

Merrill (1947) agrees with the above, pointing out that studies of personality development in children of our culture emphasize a need to be aggressive which develops during the early years in the experiencing of frustration and repression growing out of the dependency-independency relationship with parents. This is a necessary part of growing up. The parents are the source of security, love and understanding, but are also sources of frustration and inhibition because they are responsible for their childrens' learning to control their egotistical impulses in the process of socialization. Children thus have ambivalent feelings of love and hate toward their parents. In the homes of delinquent children the process of socialization is retarded by disturbed communication between parents and between parents and children. If there is conflict between his parents, a child is less likely to identify with either, since it means losing the approval of the other. This problem can be related to the concept of "split-double-bind," discussed by Ferriera (1960) which is offered as a preliminary explanation of delinquency only. The concept of split-double-bind can be explained simply as follows: the delinquent is caught between a sort of "bi-polar message" in which communication, (A) emanates from the father and communication (B) (a comment about

A) from the mother. Ferriera described the characteristics of the interactive process as follows:

"(a) Two binders, A and B, ordinarily the two parents, in the dominant... position.

(b) A "victim" C, lll ordinarily a child in the family, in the dominated... position.

(c) A series of messages from A and B to C, connected by timing and/or contact, verbal and/or non-verbal, of different logical types or levels of abstraction, and such that A's message (for instance) is a comment about B's message to the effect of opposing or destroying it." (p. 365.)

Often both messages take the form of the negative injunction "Thou shall not..."so that the "victim" thus first flaunts A's authority to conform to B's message and then later flaunts B's to be caught and punished in conformity to A's message. This formulation seems to be compatible with the commonly shared impression that delinquency is the result of inconsistency in one parent or between parents inasmuch as one parent rewards (loves) the child for not conforming with the other parent.

It also seems apparent to the present author that this concept of split-double-bind, can be applied to the early maternal influence upon the child. The mother in being inconsistent with her child is in actuality sending him "bi-polar messages". It may be that this message is related to the dependency- independency problem since every child

must be weaned and has to come to terms with the fact that he cannot monopolize his mother forever. The message may take the form of (a) "Thou shalt not be dependent upon me for the satisfaction of all your needs", and (b) "Thou shalt satisfy my need for you to remain dependent upon me and identified with me in order that I may vicariously satisfy my needs."

In attempting an explanation of the reason a particular form of delinquency is chosen over others the psychoanalytical theories have offered a great deal of information. The two types of antisocial activity under study in this paper, promiscuity and stealing, according to the psychoanalytic approach have much in common. Both of these delinquent acts must be viewed as a child's specific reaction to his life-situation which determines the choice of symptomatology. It has long been noted that boys seem to express their unhappiness by aggressive acts, the most common of which is stealing, and girls find an outlet in sexual activity. The position adopted by Zachary (1940), Karpman (1957), and Clothier (1961), is summarized by Sontag, (see Karpman 1953, 1959), when he stated:

"In the sexually delinquent adolescent girl, promiscuity may be an expression of hostility to parents for the frustration of her dependent love need. Or her delinquent behavior may be the use of her sexual desirability to gain warmth and acceptance from men ... The same basic genetics are inherent in the boy who by participating in... thieving ... attains acceptance and approval from his peers ... On the other hand, his thieving may be a simple

expression of hostility to an unloving parent." (1953, p.7; 1959, p. 152.)

The present author ventures that the delinquent act may also express a fusion of the two needs; for example, symbolic attainment of the love of which he feels deprived and for the expression of hostility towards the perceived source of the deprivation. Some support for the connection between sexual function and stealing lies in the significant increase in the incidence in thieving by females during their menstrual periods. (Kanner, 1948).

From the above it will be seen that the parents play a rather important role in the determining of the nature of the behavior of their offspring. Under this consideration the mother seems to have the greater influence than the father. This present study upon such justifications, seeks to investigate the personality and adjustment of the mothers of antisocial adolescents.

Studies Using Psychometric Methods To Assess Mothers:

It has been established that the assessment of parental attitudes as they relate to children's adjustment can be measured, tend to remain measurably consistent, and that parental attitudes are meaningfully associated with child adjustment. (Shoben, 1949).

Sopchak (1952), exploring the relationship between parental identification and tendency towards disorders as measured by the Minnesota Multiphasic Personality Inventory (MMPI), used 108 University students (78 males and 30 females) and instructed them to answer the MMPI in four different

ways: as themselves, as they thought their fathers' would, as they thought their mothers' would and as they thought others would. There were positive but non-significant correlations between identification with the mother and all types of abnormality trends, and a seemingly complete lack of identification with the father by those who showed abnormal tendencies. The author suggested that the lack of identification with the fathers may be due to feelings of hostility but did not elaborate as to the basis of this suggestion or why it may not equally apply to hostility toward mothers.

Hanvik and Byrum (1959) report a similar study. They analyzed MMPI profiles of 156 mothers and 96 fathers of child psychiatric patients and compared them with the profiles of their respective children who had all been diagnosed into 12 clinical classifications. It appeared to them that parent MMPI profile patterns were associated with particular syndromes in the child patients but that no strong relationships of any sort appeared between the father's MMPI profiles and the children's problems.

Sopchak (1958) provides somewhat contradictory evidence to that presented by Hanvik and Byrum (1959) as well as to his earlier study (1952). In a study of correlations between MMPI scores of 50 college students and their parents (41 mothers and 35 fathers), he obtained more significant correlations between the scores of males and their father's than between those of males and their mothers. On the other hand, the scores of females and their mothers were more significantly correlated than females and their fathers. Sopchak took this to

indicate that males appear to "identify" with their fathers more than their mothers, and females with mothers more than with fathers. An explanation of this apparently contradictory evidence about "identity figures" may very well lie in the groups studied and it may be that one of the reasons for an individual being described as a member of an abnormal group and exhibiting maladjustive tendencies is that of fixated opposite sex identification.

Marks (1961) studied of 48 mothers of child treatment cases not involving organic disorders and were composed of girls with a mean age of 9.6 years and boys of mean age 10.4 years. He too used the MMPI and concluded that parents of child guidance clinic patients differ from general population adults with respect to most personality variables measured by the MMPI and, specifically that with the mothers the largest differences were on the Hysteric (Hy) scale and the Psychopathic deviate (Pd) scale.

While Marcus (1960-1961), did not use psychometric methods in examining the mothers of delinquents, his usage of factor analysis to determine factors underlying the development of the criminal pattern adds confirmatory support to Bowlby's (1947) theory, in that the factor (No. 21) called "mother rejecting" has a fairly high loading throughout the matrix describing antisocial attitudes. It also appeared more significant than the factor (No. 19) termed "rebellious attitude to father."

The Relevance of the California Psychological Inventory:

Ellis (1946) commented on the validity of personality questionnaires

and noted that the MMPI appeared to be the most promising perhaps on the basis of its being capable of individual administration. Since a large percentage of the items included in the California Psychological Inventory (CPI) were extracted from the MMPI, and the methods of standardization were likewise clinical and perhaps even more objective, Ellis's comments seem applicable to the CPI as well.

Personality questionnaires have been subjected to criticism from a number of quarters (Sarbin and Hardyck, 1955; Sundberg and Bachelis, 1956; Beloff, 1958; Jackson and Messick, 1958; Jackson, 1960; Dicken, 1960; and Foster, 1961) as being only measures of conformity, acquiescent response set, and social desirability. It has also been said that they are easily faked through simulation. Acquiescent response set is defined by Foster (1961) as that consistent tendency of individuals to give affirmative responses to statements or questions irrespective of the item content. The Tolerance (To), scale of the CPI was found to contain acquiescence variance by Jackson and Messick (1958). Jackson later (1960) showed that an index of Social Desirability correlated negatively ($r_s = -.36$) with the proportion of items keyed "true" on each of the CPI scales. This was taken to indicate that a subject might reflect a higher social desirability by responding consistently in the negative direction rather than by always acquiescing. On the basis of this information, it appears that acquiescent response set and portrayal of social desirability are mutually exclusive, at least on the To scale. The high degree of acquiescence variance found to exist on the To scale can be explained within the method used by Gough (1951) to develop the To scale, of

necessity involved a series of studies on Social Intolerance using the Levinson-Sanford Anti-Semitism Scale, the California Public Opinion Survey, the MMPI and the Security - Insecurity Inventory (Maslow, 1942). He eventually developed a prejudice scale of 37 items on which he reversed the scoring so that 29 of the 37 items were keyed false on his Tolerance scale in the CPI. On the To scale an individual might receive a high acquiescent score because of the obvious inequality of numbers of true and false items on this scale.

In answer on the issue of faking of the To scale so as to create a good impression Sundberg and Bachelis (1956) instructed a group of 52 psychology students to fake prejudiced and non-prejudiced attitudes on the CPI. The results of the attempt to fake an unprejudiced score were not as clear as the faking of the prejudiced attitudes. This finding was significant statistically at the .01 level. With reference to the present study it seems relevant that subjects being used would not benefit from appearing overly prejudiced and so would be little inclined to affect prejudice.

Consideration of the nature of the experimental group in the present study increases the importance of acquiescent response set as it is entirely possible that the participants would want to show themselves in the best light, and to create the impression of being the same as other people. It would seem from the evidence presented above that the CPI To scale is not easily faked.

Dicken (1960) instructed 100 psychology students ranging in age from

18 to 30 years to play socially favorable and socially unfavorable roles in answering the CPI. He pointed out that since scale K (from the MMPI) is typically interpreted as a measure of the tendency of the subject to respond in an unduly socially desirable manner, it should be highly related to the Good Impression (Gi) scale of the CPI. In actuality Gough (1957) found the correlation to be .60. The Gi may also be a satisfactory index of social desirability. Dicken concluded that although some specific trait simulation occurred, the various simulated profiles were quite similar and the subjects were unable to obtain a distinctively high score on the trait they attempted to simulate. He felt that this suggested that differential elevation of the CPI scores could be interpreted as valid in the sense of being unsimulated. It was also ventured that individuals scoring higher than a 60 on the Gi scale were given to simulation in 79% of the cases; there were only 3% false positives.

Rundquist (1950) points out that the insertion of items in a personality questionnaire to which practically everyone answers either yes or no is a method of controlling for faking. To this end the CPI has a communality (Cm) scale.

Perhaps the essential underlying problem connected with faking is the obviousness and lack of subtlety of items on the questionnaire. Wiener (1948) in discussing this topic with regard to the MMPI, pointed out that items on personality questionnaires may be considered as being on a continuum of subtlety and both the obvious and subtle items are of

equal value. The obvious items are those which differentiate better between the grossly deviant groups and the relatively normal. The subtle items work better as discriminators of different personality traits within the more normal group. With these points in mind one sees the value of the CPI, since it includes items from the MMPI which discriminate among pathological types. It also has the more subtle items to discriminate within the more normal group. It thus provides a valuable screen for extreme deviates as well as being indicative of personality characteristics of the more normal individuals. In view of this the CPI was considered a reasonable choice for the present study.

An examination of the specific scales^I of the CPI will provide added support for its usage in the assessment of parents of selected guidance clinic cases. Before entering into a discussion about scales thought to be more relevant it must be noted that the CPI requires a reading ability of about the 6th grade level (Bennett and Rudoff, 1957), since it is very similar to the item material of the MMPI, the readability of which has been set ^{at} this level. As part of the criterion for participation in this study the mothers were required to have completed at least Grade V in school.

The cautions which Gough (1946) suggested for the use of the MMPI can also be applied to the use of diagnostic patterns on the CPI. Gough cautioned that the final usefulness of a test is the extent to which its findings can be integrated to form a meaningful picture of the subject

^I See Appendix "F".

and his maladjustment, which picture can be utilized by the counsellor or therapist in a positive and constructive manner. He further stated in referring to the MMPI specifically that subtest scores should not be considered singularly as it is not possible to infer dynamics or trends from small variations on the separate scales especially when these variations fall within the 40 to 60 standard score range.

Holding to these cautions, a look at the reported meanings of some of the scales seems warranted. This will be of value especially with reference to the scales relevant to this study. An attempt will be made to formulate a description of individuals scoring in certain directions on these particular scales.

Gough, McClosky, and Meehl (1951), in a discussion of the Dominance (Do) scale, described the high scorer as being able to influence others, to gain their respect and if necessary to control them. Further to this, they cautioned that it was not correct to assume that "dominance" in this case means a dominating or an autocratic attitude. The factor implied by the majority of the items on this scale is one of poise, and selfassurance, and self-confidence with a lack of self-doubts. This scale as a whole appears to have relevance in assessing the leadership and influencing qualities of parents. The same authors (1952), in a similar study of students, discussed the Responsibility (Re) scale and described the "responsible" person as being the one who, while not necessarily being the leader of the group, will be the individual who is dependable, sociable, tolerant and more secure in relation to his station in life. This scale

has relevance to the identification model being presented to the child by its parents.

Another important scale to consider is that of Self-control (Sc). As described by Gough (1957), this scale assesses the degree of self-regulation and freedom from impulsivity. On this scale, a high score describes a self-denying, inhibited, overly strict and conscientious person. It is the present author's contention that an overly inhibited person with high standards for themselves and for others will need to express repressed needs and desires through someone else and to obtain satisfaction vicariously as well as providing a model against which to rebel. Related to this scale (Sc), is the Achievement via Conformance scale (Ac) on which a high score typifies a person strongly acceptant of convention, well controlled emotionally and denying ill will or animosity in others (Gough, 1953). It is thought that the individual exhibiting these characteristics will also provide a model against which to rebel as well as being unsuspecting and easily manipulated.

Since there were certain maternal personality characteristics expected in this study the ^{Femininity} Femininity (Fe) scale was presumed to be of central importance. The woman with the high Fe score was described, by Gough (1952) after a study of college women and homosexuals, as being socially timid, lacking in self-confidence, restrained, cautious and prone to worry easily.

Maslow (1942) suggested that we should think of aggression as a reaction to deprivation of love, to threat, and as a defensive reaction.

Liddle (1958) conducted a study using the CPI to measure the personality characteristics of a group of high school students in the tenth grade judged to be "aggressively maladjusted." Liddle compared a group of aggressively maladjusted boys and girls with their more "normal" counterparts. He used the term "aggressive maladjustment" to describe the youngster who experiences difficulty in controlling his impulses and for this reason gets into trouble because he breaks rules, destroys property, or steals, seemingly having an indifference to the rights of others. Some hostility and a non-conformity of an antisocial nature are implied. Liddle found a significant difference between the aggressively maladjusted females and males on the Class I scales (Do, Cs, Sy, Sp, Sa, Wb) with the highly aggressive adolescent girls having mean scores above average (significant at 1% level). He also noted a difference on the Class II scales (Re, So, Sc, To, Gi, Cm) reporting that while the aggressive girls did relatively well on these scales the aggressive boys were significantly lower than the non-aggressive boys. Liddle attempted to explain this difference between aggressive males and aggressive females by noting that aggressiveness takes a different form in boys as a group compared with girls as a group. Girls more frequently describe and perhaps perceive another girl as being "aggressive" if she has high social status, is poised, is sure of herself and is seeking to be a leader. Aggression as expressed by boys takes the form of lacking in socialization, social and personal responsibility, and self-control. This relationship may also exist, perhaps in a modified form, on the CPI profiles of the mothers of antisocial male and female adolescents such as in the present work.

Perhaps the greatest support for the use of the CPI as an instrument

for investigating predispositional factors in delinquency of children lies in the Socialization (Sc) scale itself which has been sometimes called the "delinquency scale." Gough and Peterson (1952), in investigating the earlier 64 item scale, rather than the shorter form in the CPI, determined what the scale was measuring. These were:

- 1) Role-taking deficiencies, insensitivity to interactional areas and the effects of one's own behavior on others,
- 2) Resentment against family, and feelings of having been victimized and exploited during childhood,
- 3) Feelings of despondency and direction, and lack of confidence in self and others,
- 4) Rebelliousness resulting in poor scholastic adjustment.

Peterson, Quay and Anderson (1959) in a brief report on the validity of the So scale and in their elaborated paper^I, provided further support for the use of the So scale as an effective tool for discriminating between delinquents and non-delinquents. The scale was administered to 239 inmates of boys training schools and to 428 non-delinquent subjects from a school population. Matching delinquents with non-delinquents in respect to race, age and place of residence did not reduce the screening efficiency of the scale, as they were able to successfully identify 72% within both groups.

Gough (1961) in a report on the theory and measurement of socialization, cites the original data used in the development of the So scale

^I Personal communication from Senior author Dr. Donald R. Peterson.

based on the performances of 2079 delinquents (1295 males: 784 females) and 18,777 non-delinquents (9001 males: 9776 females) as well as later independent results on the So scores of unwed mothers. In a study of 16 female samples Gough reports a perfect separation between the nine samples in the more socialized group and the seven less socialized samples.

An interesting sidelight on the use of the So scale in predicting delinquency potential is provided by Sandhu (1961), who, in using a modified form of the So scale in India, confirmed his hypothesis that those groups more sophisticated in delinquency would score higher than those less experienced. He also found no significant relationships between So scores and age, offense, marital status, or length of sentence.

Generally speaking, the literature presently available supports Gough's (1957) statements about the validity of the CPI as a measure of an individuals more positive personality characteristics which enable him successfully to engage in social living and social interaction. Since delinquency is an antisocial activity, an individual engaging in such activity should be characterized by a general poor performance on the CPI as well as having more difficulty on some of the specific scales than on others. If one may be allowed to make the assumption that the parents of those children engaged in antisocial activities are personally involved with them, then it may be hypothesized that the parents of antisocial adolescents will also be characterized by having general poor performance on measures of socialization.

CHAPTER III

PROCEDURE

Selection of Sample:

The particular group of behavior problems under study here were selected after a survey of the central registry of cases seen at the Provincial Guidance Clinic in Edmonton. In the years 1961 and 1962, 74 boys and girls were presented at the Clinic with the problems of stealing and heterosexual activity respectively. It was decided that the criteria for inclusion in the research project would be:

- (1) The child would not have been judged by a qualified psychiatrist as "psychopathic".
- (2) The child's delinquencies would not have taken place as part of a gang activity. Ideally, the child should be a loner.
- (3) The child would not have been a member of a subculture such as that of the Metis, Indian, or Gypsy, etc., since in many of these types of families the antisocial acts of stealing and illicit heterosexual activity are accepted as normal modes of behavior for adolescents.
- (4) The child would have been living consistently with its natural mother prior to and at the time of the commission of the antisocial activity.
- (5) The child should be of at least normal mental ability (above I.Q. of 90 as determined by the Wechsler Tests.^I)

-v- - - - -

I Wechsler Intelligence Scales for Children

Wechsler Adult Intelligence Scale.

- (6) The child and natural mother must have resided in Canada for at least 10 years prior to the time of visiting the Provincial Guidance Clinic.
- (7) The child must not be suffering from a convulsive disorder which may cause him to act in an antisocial manner.
- (8) The family must not have been under psychiatric treatment.
- (9) The mother must not have less than a Grade V education.

The above outlined criteria were applied to the original 74 cases.

The following were rejected:

Psychopathic trends	(1)	14
Gang Activities	(2)	3
Member of Subculture	(3)	6
Not living with natural mothers	(4)	1
Not of normal mental ability	(5)	1
Residence in Canada less than 10 years	(6)	2
Convulsive disorder	(7)	5
On Psychotherapy	(8)	0
Mother's education less than Grade V	(9)	0
Total of rejections.....		32

Failure to meet the standards of this criteria accounted for a slightly less than 50% drop out of cases leaving a sample of 42 composed of 16 girls and 26 boys. The sample was further reduced due to refusal to co-operate with the project, hospitalization of mothers and unavailability due to change of address. Consequently the final reduction produced a sample of 10 girls and 16 boys from the Edmonton area.

Exactly the same procedure was applied at the Calgary Guidance Clinic and resulted in obtaining a sample of 24 potential participants. Following reduction to meet the criteria, 4 cases were used. For various reasons some were excluded:

Psychopathic trends	(1)	.....	3
Gang activities	(2)	.....	1
Members of subculture	(3)	.....	1
Not living with natural mothers	(4)	.....	4
Not of normal mental ability	(5)	.....	3
Residence in Canada less than 10 years	(6)	.....	2
Presence of convulsive disorders	(7)	.....	1
Being on Psychotherapeutic treatment	(8)	.....	1
Mother having less than Grade V education	(9)	.....	1
			<hr/>
Total of rejections.....			17

In addition, it was also not possible to contact two people because they had moved. One refused to co-operate. Thus the participating group was further limited by four.

The main goal of the criteria was to try to maximize the possible contributory effect of the mothers of the antisocial adolescents on the assumption that their personalities had had some influence upon their children since the project was focusing upon this aspect and not any other factor seemingly contributory to the development of antisocial individuals.

The importance of excluding psychopathic children was raised by

Franks (1961), inasmuch as it was supposed that psychopathic commissions of delinquent acts were of a different etiological basis.

Adolescents who committed their antisocial acts in the company of gangs were excluded because of the desirability of excluding cultural mores as a contributory factor.

Those adolescents belonging to a minority ethnic or racial group, as well as those not having been born of parents raised in Canada, were excluded for reasons outlined in the above discussion of the theories of social disorganization and cultural conflict.

Children who were not of normal mental ability or who were suffering from convulsive disorders were excluded on the basis that they may have not been reacting to parental influence when committing the antisocial act. They may have been performing an act, the significance of which they did not realize, and which quite possibly could not prevent themselves from doing.

The families which had been seen for psychotherapeutic interviews were excluded for the reason that personality changes may have occurred in the parents and hence they would not be presenting a true picture of themselves before and at the time of their child's antisocial activities.

Mothers with less than a Grade V education were excluded on the assumption that they may have been unable to read with comprehension the test used to measure their personality characteristics.

The sample used in this study was composed of 30 women, being mothers

of 12 girls and 18 boys. The offspring had all been diagnosed as "antisocial trends, heterosexual activity and stealing"^I respectively

Description of Sample:

The total group studied consisted of 60 white females, all of whom were mothers of adolescent children. The experimental group was composed of 30 mothers having antisocial children, their sons being so judged because of thievery and their daughters because of sexual promiscuity. The group was composed of mothers of 18 boys and mothers of 12 girls falling into the above cited categories. Since the purpose of this study was to measure the personality characteristics of the mothers of antisocial adolescents it was deemed advisable to attempt to maximize this effect by studying the mothers of a relatively homogeneous group of antisocial adolescents. The antisocial adolescent referred to might be therefore best characterized as a white male or female of normal mental ability, not judged to be psychopathic, not having committed his antisocial activity as part of a gang, and not suffering from a convulsive disorder, yet having lived with prior to the antisocial activity and presently living with his or her natural mother. The control group of 30 mothers of adolescents was obtained from two church ladies' groups located in separate areas of the city of Edmonton. Information regarding their age, marital status, occupational status, level of education and the sex and age of their adolescent children was obtained in order to facilitate matching with the experimental group.² There were an

^I Policy Manual, diagnostic classification of the Provincial Guidance Clinic of Alberta. April 1960. Revised Edition, Edmonton.

² See Appendix "H".

additional 6 mothers of non-antisocial adolescents tested but they were excluded from the control group due to failure to meet the criterion of the experimental group; four on the basis of a lack of understanding of the test due to a language difficulty, one mother for reason of educational level below Grade 5, and one mother for lack of children in the specified age group.

It was discovered that by matching the experimental group with the control group mothers on the basis of their age that their children's ages also approximated each other. The mothers of the two groups, as can be seen in Table I, are closely comparable with regard to their ages.

TABLE I

Age Range and Means of Mothers of
Antisocial and Non-antisocial Adolescents.

Classification	N	Age - Range	Means
Antisocial Group	30	34 - 58	41.9
Non-Antisocial Group	30	34 - 55	41.8

Since the age range and mean ages of the two groups were practically identical it was thought unnecessary to calculate any statistical significance of differences. Likewise inspection of Table II , which describes the age range and mean ages of the adolescents, reveals no apparent difference between the antisocial and non-antisocial groups on the basis of age.

TABLE II

Age Range and Means of
Antisocial and Non-Antisocial Adolescents.

Classification	N	Age - Range	Means
Antisocial Group	30	13.0 - 18.8	15.9
Non-Antisocial Group	30	13.0 - 19.1	15.3

Similarly, the mothers of both groups were matched on the basis of their educational background as can be seen from inspection of Table III.

TABLE III

Educational Background
of the Mothers.

Classification	N	Range in Years	Means
Antisocial Group	30	5 - 15	10
Non-Antisocial Group	30	8 - 17	10
Total	60	5 - 17	10

Since much discussion has developed recently with regard to the incidence of mothers working out of the home and the contribution of this factor to the emotional and behavioral maladjustment of their children it was decided to compare the mothers of the two groups in this factor. As is shown in Table IV the difference which existed between the two groups was not significant statistically as determined by chi square analysis.¹

TABLE IV

Occupational Status of Mothers
of Antisocial and Non-Antisocial Groups
and Total Groups.

Classification	N	Housewife	Employed out of home
Antisocial Group	30	21	9
Non-Antisocial Group	30	23	7
$\chi^2 = .91$		df = 1	N.S.

A word of caution may be warranted with regard to interpretation of this result as it only indicates that at the time of the study there was no significant difference in the occupational status of the two groups of mothers. It

1. See Appendix "I"

should not in any way be taken to indicate that the same situation applied during the earlier years considered to be the formative ones in their children's personalities. It may very well be that the mothers of the anti-social adolescents significantly differed from the mothers of non-antisocial adolescents in the working habits during this earlier time. However, this must be considered speculative.

It is shown in Table V that a significant difference existed between the mothers of the antisocial group and the mothers of the non-antisocial group with regard to their present marital status. For the purpose of chi square analysis the mothers were divided into two groups, one being that of those presently married to the putative fathers of the adolescent which qualified the mother for the study and the other being those mothers who were either divorced, separated or widowed from the putative father or who had remarried and hence provided the adolescent in question with a step-father.

TABLE V

Marital Status of Mothers of
Non-Antisocial and Antisocial Groups.

Classification	N	Presently Married to Putative Father	Divorced, Widowed or Remarried
Antisocial Group	30	18	12
Non-Antisocial Group	30	28	2
2			

One of the greatest limitations inherent in a study of this type is to obtain an adequate control group. Ideally one should match the experimental group of mothers with control mothers similar in all ways except one, the experimental variable of having a child exhibiting anti-social trends. It was realized that to the extent that this study was to be a success or a failure depended to a large extent upon the degree to which the two groups were successfully matched. As can be seen by examination of the preceding tables a measure of success was obtained with the mothers being of similar age, and being comparable because of having children of similar age and the same sex. The mothers also were comparable with regard to their educational background, and occupational status. Unfortunately there were factors, often thought to be contributive to delinquent patterns, which were not explicitly controlled for. These were; level of income, sibling arrangement, race, family religion, and marital status. As is noted above there was a significant difference between the two groups on the marital status factor. The factor of family religion was controlled for in part as all members of both groups were of protestant faith and primarily of the Anglican and United Church denominations. Similarly, with regard to racial origin, all participants were second generation Canadians with their children thereby being third generation. The level of income for both groups, although not definitely known, was judged to be comparable, in the range of \$3000 to \$6000 per annum, this estimate being based upon the occupational status of the fathers, if known. There were no controls placed over sibling arrangement. It is therefore with these matching limitations in mind that the results of the study should be interpreted.

Since no predictions were made as to direction of differences between the two groups a two-tailed "t" test of significance was employed. The results of analysis of differences and similarities between the two groups are presented as indication of homogeneity and comparability since the study was intended to be one of matched groups.

It is the author's belief that the control group was sufficiently similar to the experimental group as to be considered statistically comparable, within the limits stated above.

As it will be recalled, one of the problems of this study was to choose a personality test which would measure those maternal characteristics believed to be influential in the development of antisocial children. Consequently, it was thought that parental attitudes, beliefs, feelings and actions were contributing factors in the development of their children's personality. Since the nature of the maternal influence was judged to be socio-behavioral it was thought that the test should measure these factors. It was also necessary to choose a test which could be administered economically which was not overly threatening or difficult to the subjects, the findings of which would be handled statistically. The California Psychological Inventory (Gough, 1957), was considered to be the most suitable for this task. Some justification for this selection may be found in a study by Marks (1961) in which he reports successful discrimination of parents of a child guidance clinic population from that of the general population with respect to most of the personality variables measured by the MMPI. It is interesting to note he achieved more success in the description of mothers. He noted

further that the MMPI whether used as a source of data about the parents, or as an instrument for generating inferences about their children, was more efficient than psychiatric diagnostic methods.

Since the CPI (Gough, 1957) contains some 200 of its 480 items from the MMPI and is in this way somewhat similar, Mark's (1961) study is noteworthy.

The CPI is primarily intended for use with essentially normal subjects, (Gough 1954, 1957; Shaffer 1957; and Liddle, 1958) and strives to assess variables having broad social and interactional relevance of a positive nature considered important for social living.

One of the desirable features of the CPI is its manual which contains a large amount of empirical data descriptive of the properties of the inventory and its validity. These data include correlations among the separate CPI scales, and between CPI scales and other psychological tests based upon seemingly quite adequate samples.

The CPI is made up of 18 scales divided into 4 classes.¹ All but four of the scales were developed by item analysis against external criteria. The socialization scale, for example, discriminates between delinquents and non-delinquents and also has significant relationships with adjectival description of normal persons. (Gough and Peterson 1952; Brown 1956; Peterson, Quay and Anderson 1959; and Jackson 1960). The other 4 scales: Social Presence, Self Acceptance, Self Control and Flexibility were formulated by content and refined by item-analysis for internal consistency (Gough 1957).

¹ See Appendix F.

It has been suggested (Wiener 1948) that there may be a conscious or unconscious tendency in subjects to present a picture of themselves in keeping with their conception of the testing situation. This tendency is thought to have considerable influence upon the personality test scores. In personality tests of the inventory or questionnaire type the items vary in obviousness and subtlety. The obvious items distinguish best between the abnormal and the relatively normal groups whereas subtle items seem to be the most relevant in measuring the personality characteristics of normal individuals. Since the subjects under study in this project were not morbidly disturbed or of a readily discernible pathological group one must assume that the test best suited to measure their personality characteristics would require an abundance of subtle items.

Instruction for the test appears on the booklet cover ¹. These instructions were indicated to the subject and were also given verbally. The scoring of each subject's answer sheet was done in the standard manner.

The raw scores which were obtained were then converted to standard scores by use of the tables in the manual (Gough 1957).

Since this study was done following the initial contact by the parents and children with the Provincial Guidance Clinic it was necessary to contact the mothers by telephone and to request that they return to the Provincial Guidance Clinic in order to complete the CPI. In

¹ See Appendix A.

contacting the mothers it was emphasized that participation in the research project was voluntary and that anonymity would be preserved. The tests were administered individually by the writer. In the case of the control group the tests were administered in group form in the presence of the writer who also obtained personal information from the participating mothers by means of a specially prepared form.¹

¹ See Appendix H.

CHAPTER IV

TEST RESULTS

Preliminary examination of the mean score profiles¹ for the antisocial and non-antisocial groups revealed that while the experimental group was lower than the control group on all of the scales except five, there was not an appreciable difference between them in elevation of profiles. Further evaluation of the mean score profiles² for the mothers participating in the non-antisocial control group revealed a similarity suggestive of the homogeneity that was wished. Likewise, profiles³ comparing the means for mothers of the antisocial and non-antisocial males as well as antisocial and non-antisocial females, were plotted but due to the small number of individuals in each subsample further statistical treatment was deemed inadvisable. One further profile⁴ was plotted to compare the means of the mothers of male antisocial adolescents with the mothers of female antisocial adolescents and yielded what appeared to be significant differences on thirteen of the eighteen scales. The data of the experimental and control group and subgroups were initially treated statistically by calculation of the means and standards deviations⁵. It was predicted that there would be significant

1 See Appendix "C"

2 See Appendix "D"

3 See Appendix "F" and "G" respectively.

4. See Appendix "E"

5. See Appendix "I" for formula (Ferguson G.A. 1959, Ch.3 and Ch.4)

differences between the means of the various groups. The data of the antisocial group, and the non-antisocial group was combined forming a third group of data descriptive of the CPI, personality characteristics of mothers of adolescent children. These data were subjected to further statistical analysis by use of the point biserial correlation and "t" test of significance¹.

The point biserial correlation coefficient was intended to be a measure of the capacity of the CPI, to discriminate between the two groups described as being the antisocial group and the non-antisocial group and the two subgroups termed the male antisocial group and the female antisocial group. The direction of the correlation may be determined by inspection of the data. The significance of the point biserial correlation coefficient was determined by two tailed "t" tests and in effect is testing the significance of the difference from zero.

Table VI is descriptive of the means and standard deviations of the antisocial total group and subgroups and the non-antisocial total group and indicates a seemingly greater range of means and standard deviations in the experimental group than in the control group. In reference to the male-female subgroup it is evident that there is far greater variability in the male group than the female group with fifteen standard deviations being above 12 and ranging as high as 18 compared with only one standard deviation above 12 on the female group scales².

¹ See Appendices "J" and "K" for formulae (Ferguson G.A. 1959, Ch.13).

² See Appendices "C", "D", "E", "F" and "G".

Table VII reports the results of the point biserial correlations and the tests for significant difference between the antisocial and non-antisocial groups. As can be observed very quickly there were no scales which predicted significantly between the two groups. One scale Py (Psychological Mindedness) showed a trend but not significant enough to warrant predictability with any degree of confidence. It is also interesting to note that the profiles¹ of the means of both groups lie within one standard deviation of the mean standard score of fifty with the exception of the antisocial groups' mean scores on the Cs (Capacity for Status) and Sa (Self-Acceptance) scales which were barely below the cut-off standard score of forty.

The results reported in Table VIII represent the point biserial correlations and the tests for significant differences between the mothers of male antisocial adolescents as compared with the mothers of female antisocial adolescents. There were differences, significant at greater than the .05 level between the mothers of the antisocial male and the antisocial female groups on three scales (So, Sc, and Ac). Specifically, the scales which successfully discriminated at better than .01 level between the experimental and control group, were: So (Socialization), and Ac (Achievement via Conformance). Of special interest is the pronounced significant difference recorded on the So Scale which is reported to be a measure of delinquency potential.

1. See Appendix "C"

TABLE VI

MEANS AND STANDARD DEVIATIONS OF ANTISOCIAL AND NON-ANTISOCIAL TOTAL
GROUPS AND MALE-FEMALE SUB-GROUPS.

MEANS					STANDARD DEVIATIONS			
SCALE	Anti-Social Group	Non Anti-Social Group	Anti-Social Males	Anti-Social Females	Anti-Social Group	Non Anti-Social Group	Anti-Social Males	Anti-Social Females
	N = 30	N = 30	N = 18	N = 12				
Do	41.77	43.53	39.67	44.92	9.33	8.49	9.99	7.55
Cs	38.67	41.97	37.06	41.08	14.80	9.79	18.14	10.58
Sy	43.40	44.10	40.50	47.75	13.12	11.19	14.28	10.20
Sp	41.53	42.93	42.05	40.75	15.43	8.84	18.08	10.86
Sa	40.27	43.77	39.50	41.42	10.82	9.74	12.21	8.66
Wb	46.50	48.80	43.22	51.42	15.07	12.00	17.55	7.94
Re	49.30	50.03	47.39	52.17	9.43	7.62	10.68	6.56
So	46.93	49.63	42-44	53.67	9.75	9.41	8.72	7.14
Sc	54.20	53.30	50.17	60.25	11.31	9.90	12.69	5.00
To	47.07	50.50	43.11	53.00	14.97	9.29	16.40	10.54
Gi	50.20	48.03	47.06	54.92	11.27	11.05	12.77	6.56
Cm	49.57	50.33	47.33	52.92	8.89	10.60	9.38	6.33
Ac	46.20	45.67	42.22	52.17	11.62	7.36	12.77	6.25
Ai	50.20	51.03	50.06	50.42	11.83	7.46	12.49	11.31
Ie	43.97	45.40	40.39	49.33	14.53	12.16	16.70	8.66
Py	50.97	47.17	49.22	53.58	10.86	5.79	10.91	9.95
Fy	50.13	47.47	52.56	46.50	12.33	9.99	12.12	12.21
Fe	57.13	57.57	56.28	58.42	8.66	9.33	10.05	6.25

TABLE VII

MEANS OF ANTISOCIAL, NON-ANTISOCIAL AND TOTAL GROUPS; STANDARD DEVIATION
OF TOTAL GROUPS; POINT BISERIAL CORRELATIONS - "t" TEST RATIOS FOR SCALES
OF CPI.

Scale	\bar{X} Del. Group.	\bar{X} N.Del. Group	\bar{X} . Total Group	S.D.Total Group	r pbi	"t" *	Signif.
Do	41.77	43.53	42.65	8.96	+.098	.7498	.40
Cs	38.67	41.97	40.32	12.66	+.130	.9990	.30
Sy	43.40	44.10	43.75	12.19	+.029	.2187	.80
Sp	41.53	42.97	42.23	12.59	+.056	.4239	.60
Sa	40.27	43.77	42.02	10.45	+.167	1.2901	.20
Wb	46.50	48.80	47.65	13.67	+.084	.7644	.40
Re	49.30	50.03	49.67	8.58	+.043	.7622	.40
So	46.93	49.63	48.28	9.69	+.139	.7691	.40
Sc	54.20	53.30	53.75	8.85	-.050	.7626	.40
To	47.07	50.50	48.78	12.57	+.136	1.0487	.30
Gi	50.20	48.03	49.12	11.21	-.097	.7404	.40
Cm	49.57	50.33	49.95	9.79	+.039	.2958	.70
Ac	46.20	45.67	45.93	9.73	-.027	.7619	.40
Ai	50.20	51.03	50.62	9.89	+.047	.7624	.40
Ie	43.97	45.40	44.68	13.41	+.053	.7627	.40
Py	50.97	47.17	49.07	8.90	-.214	1.664	.10
Fx	50.13	47.47	48.80	11.30	-.118	.7670	.40
Fe	57.13	57.57	57.35	9.01	+.024	.7638	.40

*Two-tailed test.

df = 58 (used infinity figures).

Delinquent Group N = 30

Non-Delinquent Group N = 30

TABLE VIII

MEANS OF EXPERIMENTAL, OF SUBGROUPS; STANDARD DEVIATIONS OF TOTAL GROUP;
POINT BISERIAL CORRELATIONS AND "t" TEST RATIOS FOR SCALES OF CPI.

Scale	\bar{X} Male Del. Group	\bar{X} Female Del. Group.	\bar{X} Total Group	S.D.Total Group	r pbi	"t" *	Signif.
Do	39.67	44.92	41.77	9.50	+.271	1.489	.20
Cs	37.06	41.08	38.67	15.70	+.125	.665	.60
Sy	40.50	47.75	43.40	13.37	+.266	1.460	.20
Sp	42.05	40.75	41.53	15.61	-.041	.218	.90
Sa	39.50	41.42	40.27	10.97	+.086	.457	.70
Wb	43.22	51.42	46.50	15.12	+.266	1.460	.20
Re	47.39	52.17	49.30	9.59	+.244	1.331	.20
So	42.44	53.67	46.93	10.07	+.546	3.449	.007**
Sc	50.17	60.25	54.20	11.62	+.425	2.485	.02**
To	43.11	53.00	47.07	15.26	+.318	1.775	.10
Gi	47.06	54.92	50.20	11.50	+.335	1.881	.10
Gm	47.33	52.92	49.57	8.81	+.311	1.731	.10
Ac	42.22	52.17	46.20	11.88	+.410	2.378	.05* *
Ai	50.06	50.42	50.20	12.03	+.015	.079	.90
Ie	40.39	49.33	43.97	14.82	+.296	1.640	.20
Py	49.22	53.58	50.97	10.78	+.198	.107	.90
Fx	52.56	46.50	50.13	12.57	-.236	1.285	.30
Fe	56.28	58.42	57.13	8.81	+.119	.634	.60

* Two tailed test ** accepted at .05 level.

df = 28

Male N = 18

Female N = 12

STATE OF NEW YORK

IN SENATE

JANUARY 1, 1875

REPORT

OF THE

COMMISSIONERS OF THE LAND OFFICE

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE

ON APRIL 1, 1874

AND BY THE ASSEMBLY

ON APRIL 1, 1874

AND BY THE SENATE

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ON APRIL 1, 1874

AND BY THE ASSEMBLY

ON APRIL 1, 1874

CHAPTER V

DISCUSSION OF RESULTS.

One of the basic questions contained in this research was whether or not the CPI was able to discriminate between the selected sample of mothers of antisocial adolescents and the matched group of mothers of adolescents not exhibiting an antisocial pattern. The results indicated that such a discrimination was not possible with this test. The reason for this lack of discrimination may lie in the unfortunate and circumstantial combination of the sexes of the adolescents. It may be that the combination of the mothers of male and female antisocial adolescents into the experimental group resulted in members of one sex cancelling out the effect of the other to the extent that their mean scores would thereby approximate the mean scores of the mothers of the non-antisocial adolescents. Some support for this explanation may exist in the divergent theoretical positions holding that the mothers could be termed both rejectant and over-protective, (Bowlby, 1947; Gluecks, 1950; Burchinal, 1958; Bandura and Walters, 1959; Karpman, 1953; 1959; McCord, McCord and Howard, 1961) : these maternal attitudes probably vary for male and female offspring and consequently, blending would invite some cancellations.

Moreover, it is now felt that in keeping with Sopchak's (1958) study with the MMPI, perhaps one of the significant factors related to the failure of the CPI to discriminate between the experimental and control groups lies in the identification models of the antisocial groups.

Sopchak found that the scores of mothers and daughters were significantly more related to each other than mother-son or daughter-father and interpreted this to indicate that females tend to identify more strongly with their mothers than males do and oppositely with their fathers.

It was the present author's belief that the mother may have been doing one of two things or a combination of both in contributing to the development of her child's delinquencies. She may have been a generally inconsistent person who, as described by Scott (1960-61), would produce feelings of frustration and failure in her child because of the latter's inability to predict and conform to her demands. She would thus provide a model against which to rebel due to the consequent frustrations she would cause the child to experience. It is Scott's contention that continued frustration and failure cause the learning processes in the child to cease operating effectively. This results in stereotyped maladaptive behavior which in the present author's opinion may be considered antisocial. The other role of the mother, thought to be a predisposing factor in the development of her antisocial child, is one of motivation. Through the motivating of her child to express sociably undesirable behavior the mother is unconsciously providing vicarious satisfaction for her own desires to be antisocial. Some support is obtained from Sears and his colleagues (1957) who found that aggression in childhood was associated with, among other things, a high degree of permissiveness for the expression of aggression and the mother's dissatisfaction with

her role in life. At this point, it may be relevant to point out that in the present study the mothers of the antisocial adolescents were significantly different from the control group in their marital history, a factor which may be related to their being occupied out of the home and thereby providing a situation whereby their children were left unsupervised by any close relative to which they might be held responsible. Hence, the author contends that the mothers described as being rejectant and producing delinquents may differ significantly on the basis of measurable personality traits, from the mothers described as being overprotective and producing delinquent children. Similarly the mother described as frustrating her child into maladaptive behavior may differ from the mother who motivates her child to become antisocial in order to satisfy her own needs.

It may be argued that the CPI is not an appropriate instrument with which to measure the particular personality variables which may be involved here. While it reportedly includes measures of a wide variety of psychological dimensions, it may for reasons of its apparent high item loadings in social desirability and conventional response material not be sufficiently sensitive for the more extreme behavior pathology. Jackson and Messick's (1958), contention that the test would best be interpreted in terms of style of response rather than specific item content may be a factor to consider since both groups studied may have been similar by both being generally conforming in attitude.

The failure of the CPI to discriminate between the two groups may lie in the composition of the experimental group rather than in something

inherent in the test itself or may be most justly attributed to the uncontrolled factors existent in the control group. As was pointed out earlier the experimental group and control group were not identical with regard to several factors, two of which were economic status and sibling arrangement. In addition there was the statistically significant difference with regard to marital status. However, this latter variable was expected to be present and may be interpretable as not necessarily being a contributive factor in the development of antisocial trends but as being a result of the parents neurotic interaction which may in fact be the reason for their child's antisocial actions. Support for this interpretation is obtained from Waggoner and Boyd (1941) in their study dealing with juvenile aberrant sexual behavior. Similar support is obtained from Karpman (1952) in his discussion of the psychodynamics of juvenile delinquency.

Other aspects of the study provide indications that the CPI may still prove to be a useful screening instrument. Turning specifically to the second hypothesis of the study concerned with intra-group differences between the mothers of male and female antisocial adolescents the interpretation of the results appear to be more promising. While the second hypothesis was also not confirmed, some interesting trends were established. It is particularly interesting that the scales which proved to be capable of significant discrimination were, with the exception of one Ac (Achievement via Conformance), all members of Class II which is described by Gough (1957), as being composed of measures of socialization, maturity and responsibility. Perhaps the most relevant scale for the purpose of this

study is the So (Socialization) scale described by some (Gough, 1952, 1961; Brown and Bystry, 1956; Peterson, Quay and Anderson, 1959; Sandhu, 1960), as being a Delinquency scale which indicates potentiality for delinquent behavior and the tendency to rebel against authority and convention. It was on this scale that the greatest significant difference (greater than .01 which implies greater than 99% confidence limits), was obtained with the mothers of female antisocial adolescents scoring higher than the mothers of males and hence being described as being more socially mature and providing the model of a serious, honest, modest, conscientious person showing a high degree of integrity. With a considerably higher mean score on the Sc (self-control) scale one begins to obtain the picture of a woman who is characterized by inhibitory, self-denying traits which may lead to a build up of impulse pressure. Since this mother would be providing an extreme model of virtue and inhibitory modesty for her daughter; it is understandable that the daughter could act out impulsively against this model through promiscuous behavior. These findings may be interpreted as being supportive of the author's belief that the mother may be providing a model to rebel against and in addition may be unconsciously motivating - their daughters to rebel in order to allow vicarious satisfaction of their own sexual needs. Perhaps in this relation the concept of scapegoating may also apply since it seems that the girl in rebelling through sexual promiscuity is providing the family, and for that matter, society, with a target for the expression of pent up aggressions. Conversely with the mothers of antisocial boys they would be best described as being defensive, demanding, resentful and uninhibitedly aggressive so that if their sons

happened to be identifying with them (a possibility by virtue of a lack of father or presence of a step-father) they would be provided with a model permitting and perhaps encouraging the expression of aggression through antisocial behavior.

It is appreciated that any interpretation of results based upon a small number (3) of positive significant discriminatory correlations must be tempered with a certain degree of doubt. Hence, one may perhaps best approach these interpretations as being speculative and hypothesis-forming. If these interpretations of the differences between the mothers of male and female antisocial adolescent children can be accepted then the present author's explanation of the failure of the CPI to discriminate between the antisocial and non-antisocial groups becomes more tenable. However, the fact remains that in this study, the CPI failed to differentiate significantly between the main experimental and control groups on a single scale, and only on three scales out of eighteen when mothers of male antisocial adolescents were compared with mothers of female antisocial adolescents.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS.

Conclusion:

This study was undertaken to investigate the feasibility of using a standardized psychological test to measure the personality characteristics of a group of mothers of antisocial adolescent children and to compare their characteristics with those possessed by a matched group of mothers of adolescent children not exhibiting the antisocial pattern of behavior. To achieve this, the CPI was administered in the belief that it would prove to be capable of discriminating not only between the antisocial and non-antisocial groups but also between the mothers of male and the mothers of female antisocial youngsters. Three hypotheses were offered, none of which were confirmed. The second, being concerned with the selection of mothers of males from mothers of females exhibiting an antisocial pattern proved to be hypothesis producing. The results obtained from this study, while not indicating that the CPI is an instrument capable of discriminating between the mothers of antisocial youngsters from those without youngsters of this type, do indicate that the CPI may be a useful instrument for providing clinical information about the parents of children presented to a child guidance center. This information may best be thought of as being speculative.

Recommendations:

The strongest recommendation that should be made as a result of this study is that further research into the same area should be attempted, but

with more comprehensively matched groups. A study should be made in which the CPI is administered to both mother and daughter in order to test the hypothesis of the existence of a similarity of personality characteristics due to mother-daughter identification. Beyond this, a study of fathers of antisocial adolescents should be undertaken.

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2. The second part of the report deals with the results of the work during the year. It is divided into two main sections: the first section deals with the results of the work in the field and the second section deals with the results of the work in the laboratory.

3. The third part of the report deals with the conclusions of the work during the year. It is divided into two main sections: the first section deals with the conclusions of the work in the field and the second section deals with the conclusions of the work in the laboratory.

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7. The seventh part of the report deals with the appendix of the work during the year. It is divided into two main sections: the first section deals with the appendix of the work in the field and the second section deals with the appendix of the work in the laboratory.

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9. The ninth part of the report deals with the conclusion of the work during the year. It is divided into two main sections: the first section deals with the conclusion of the work in the field and the second section deals with the conclusion of the work in the laboratory.

10. The tenth part of the report deals with the final remarks of the work during the year. It is divided into two main sections: the first section deals with the final remarks of the work in the field and the second section deals with the final remarks of the work in the laboratory.

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APPENDIX "A"

California Psychological Inventory

HARRISON G. GOUGH, Ph.D.

DIRECTIONS:

This booklet contains a series of statements. Read each one, decide how you feel about it, and then mark your answer *on the special answer sheet*. MAKE NO MARKS ON THE TEST BOOKLET. If you *agree* with a statement, or feel that it is true about you, answer TRUE. If you *disagree* with a statement, or feel that it is not true about you, answer FALSE.

In marking your answers on the answer sheet, make sure that the number of the statement is the same as the number on the answer sheet. Be sure to answer either TRUE or FALSE for every statement, even if you have to guess at some.

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APPENDIX "B"

CALIFORNIA PSYCHOLOGICAL INVENTORY

CLASSES AND SCALES

CLASS I. Measures of Poise, Ascendancy, and Self-assurance.

1. Do Dominance
2. Cs Capacity for status
3. Sy Sociability
4. Sp Social Presence
5. Sa Self-acceptance
6. Wb Sense of Well-being

CLASS II. Measures of Socialization, Maturity, and Responsibility.

7. Re Responsibility
8. So Socialization
9. Sc Self-control
10. To Tolerance
11. Gi Good Impression
12. Cm Communality

CLASS III. Measures of Achievement, Potential and Intellectual Efficiency.

13. Ac Achievement via Conformance
14. Ai Achievement via Independence
15. Ie Intellectual Efficiency

CLASS IV. Measures of Intellectual and Interest Modes.

16. Py Psychological Mindedness
17. Fx Flexibility
18. Fe Femininity

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PROFILE SHEET FOR THE California Psychological Inventory: FEMALE

Name: _____

Age: _____

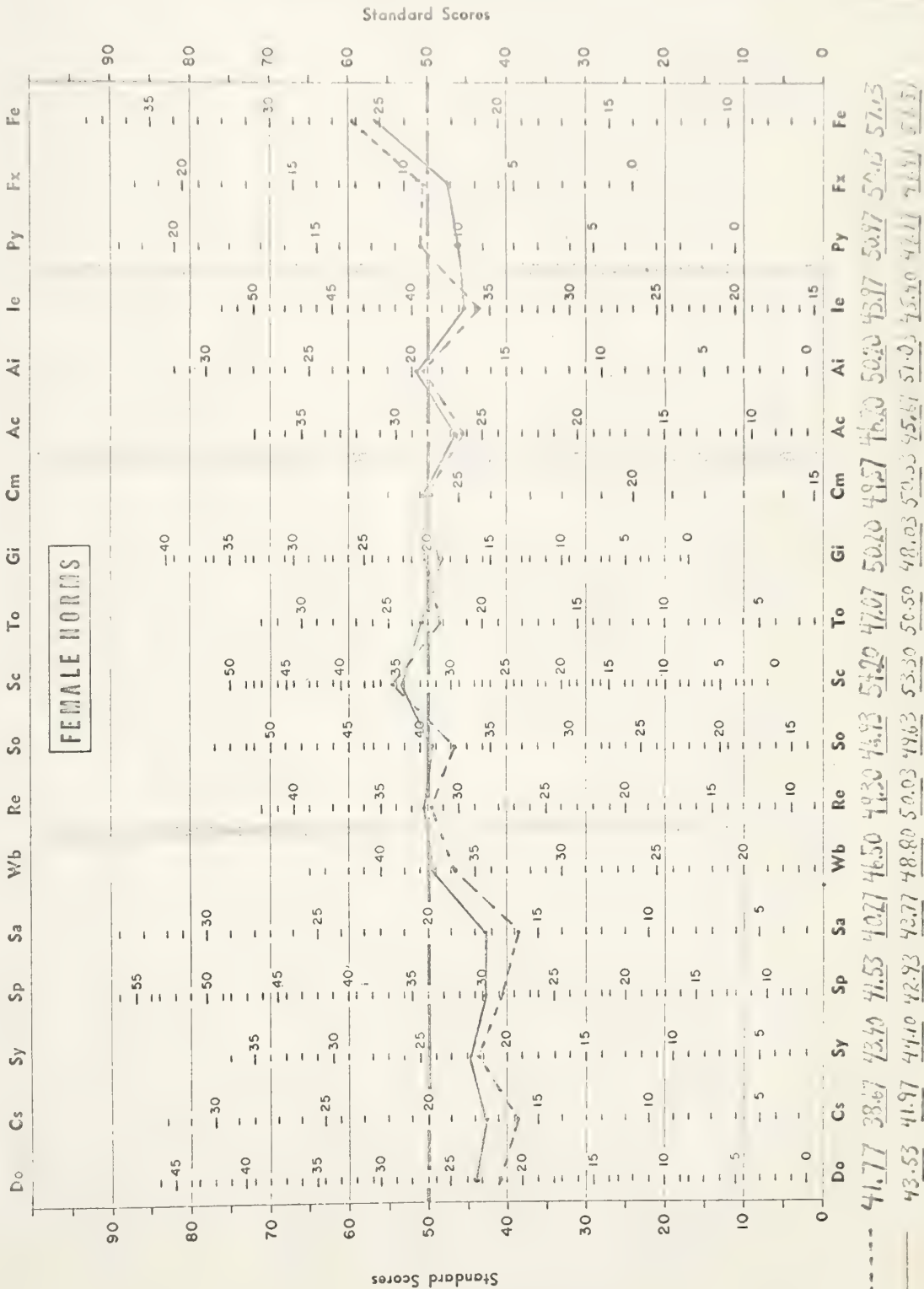
Date Tested: _____

Other Information: _____

Notes:

Profile of the Means for Members of Antisocial Group and Non-Antisocial Group on C.P.I. Inventory.

Antisocial Group..... N = 30
Non-Antisocial Group..... N = 30



Date Tested _____

Other Information.

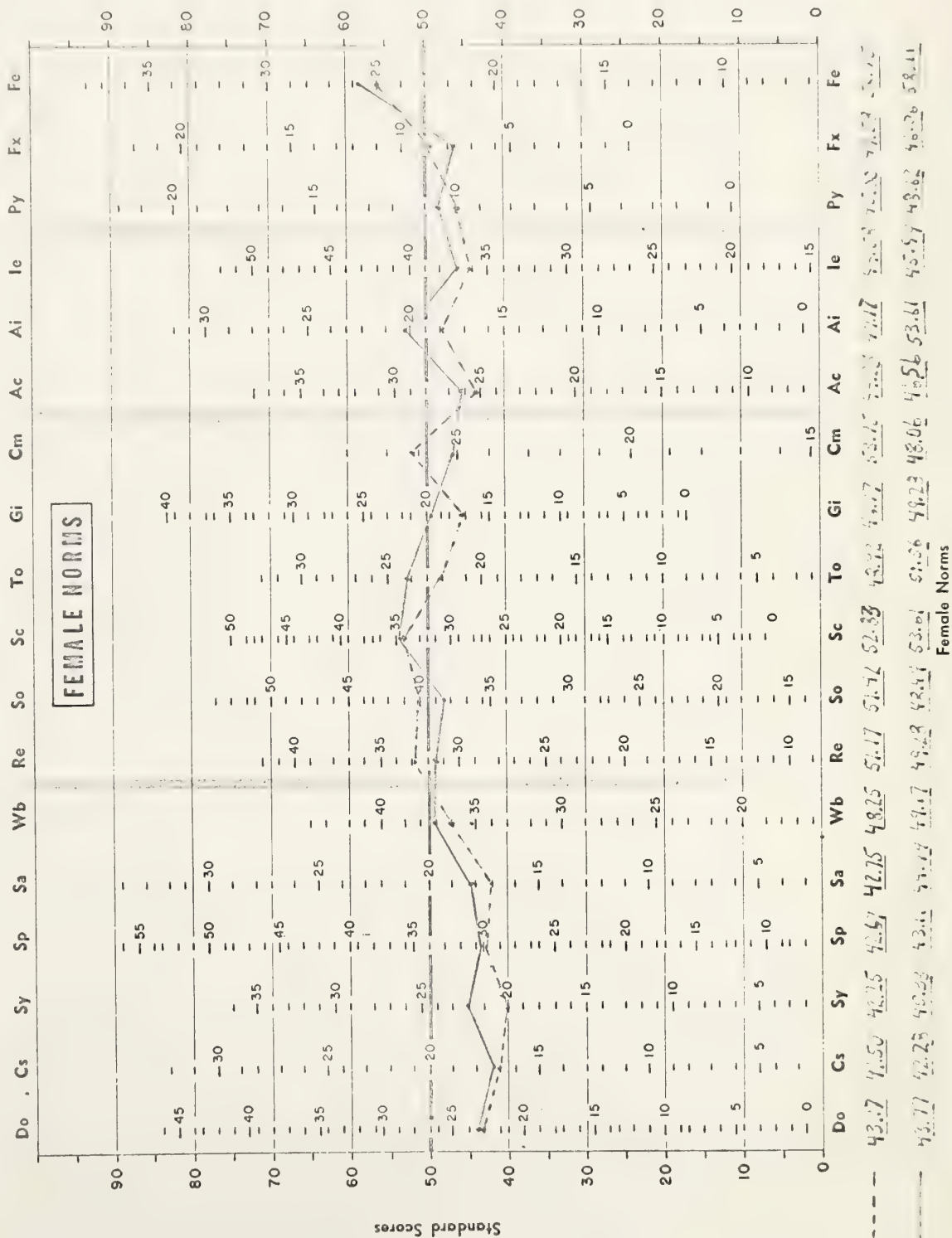
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Profile of the Means for Males of Non-Antisocial Male & Non-Antisocial Female Groups on C.P.I. Scales.

Non-Antisocial male Group..... N = 18

Non-Antisocial Female Group..... N = 12

Standard Scores



PROFILE SHEET FOR THE California Psychological Inventory: FEMALE

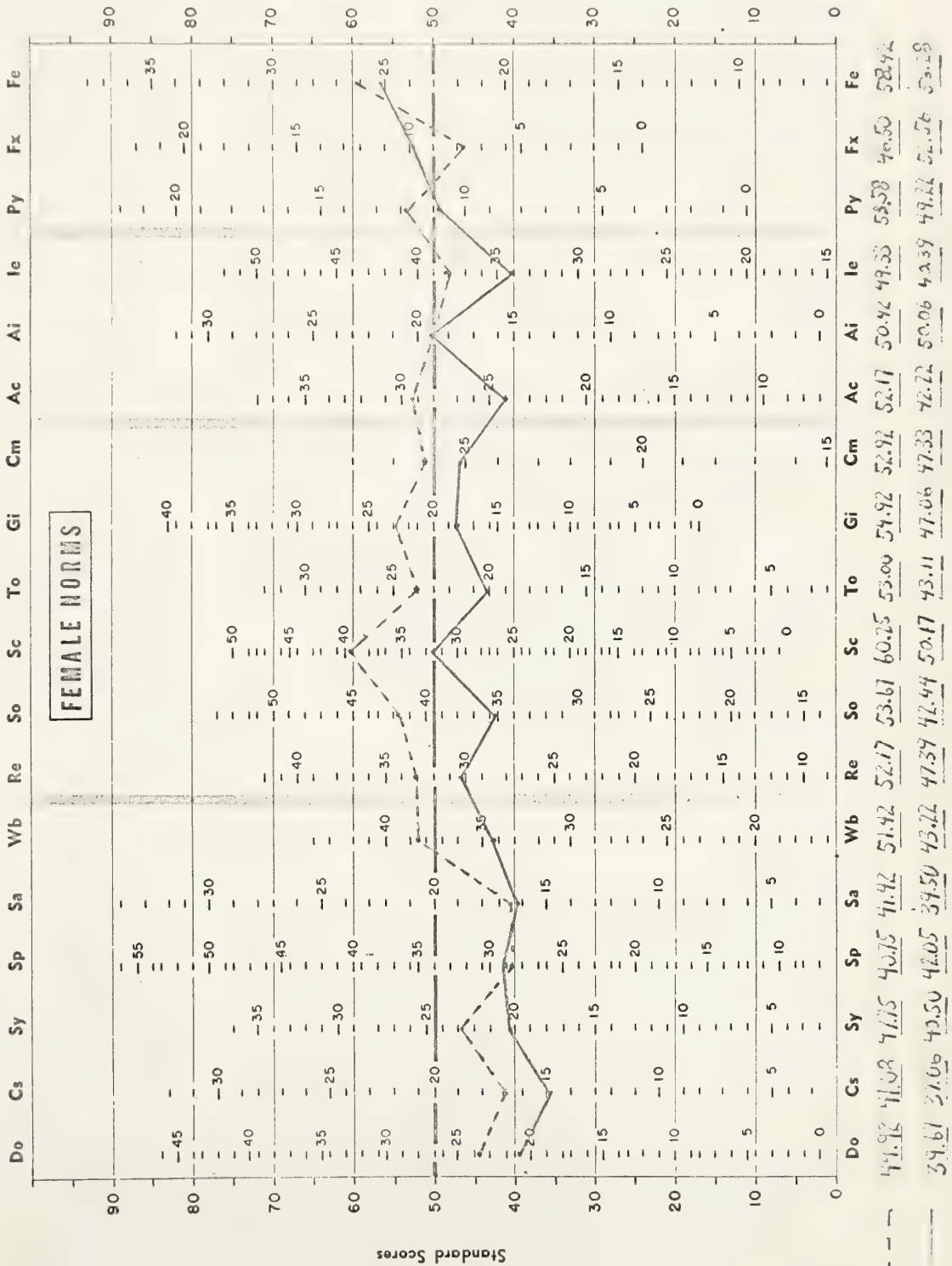
Name _____ Age _____ Date Tested _____

Other Information _____

Notes:

Profile of the Means for Mothers of Antisocial Male & Antisocial Female Groups on the C.P.I. Scales.

Antisocial Male Group.....N = 18
Antisocial Female Group.....N = 12
Standard Scores



PROFILE SHEET FOR THE California Psychological Inventory: FEMALE

Name: _____ Age: _____ Date Tested: _____

Other Information: _____

Notes:

Profile of the Means for Mothers of Antisocial Male Group
& Non-Antisocial Male Group.

Non-antisocial Male Group..... N = 18

Antisocial Male Group..... N = 18

Standard Scores



PROFILE SHEET FOR THE California Psychological Inventory: FEMALE

Notes:

ALPHA FACTOR

Profile of the Means for Mothers of Antisocial Female Group & Non-Antisocial Female Group.

Non-Antisocial Female Group.....N = 12

Antisocial Female Group.....N = 12

Date Test

Age

Other Information



44.92	41.08	41.15	40.75	41.42	51.42	52.17	53.67	62.25	53.00	58.92	52.92	52.07	50.42	49.33	53.53	40.50	53.44
43.17	41.50	42.05	42.07	42.15	48.25	50.07	50.42	52.83	48.92	46.17	53.75	49.33	46.17	49.53	45.00	48.58	50.15

Female Norms

APPENDIX "H"

CPI RESEARCH PROJECT CONTROL GROUP

INFORMATION FORM.

1. How long have you resided in Canada?
2. What is your present age?.....Birthdate?.....
3. Marital status: Married.....Widow.....Divorce.....Separated.....
If separated, divorced or Widowed, for how long?.....
4. What education did you receive?.....
5. What is your husband's age?.....Education.....
6. How many children do you have?.....
7. Please list your teenage children, (13 - 19 years) below.

	SEX	AGE	BIRTHDATE	GRADE @ SCHOOL
(a)				
(b)				
(c)				
(d)				
(e)				

8. Have any of your children ever taken part in any delinquent activities of a nature so as to involve the police? Yes..... No
Which children (a).....(b).....(c).....(d).....(e).....
9. If yes to number 8. please state the nature of the delinquency.....
.....
.....
10. Are you gainfully employed outside of your home?.....
If so, for how long have you been so?.....

Please rest assured that your anonymity will be preserved with reference to the above information and to the results of the psychological test.

APPENDIX "I"

Calculation of Means and Standard Deviations from the Standard Scores on the CPI Scale.

The means and standard deviations for the Antisocial and Non-antisocial Groups and the Male-Female proportions thereof were calculated by use of the formulae.

Mean:
$$\bar{X} = \frac{\sum_{i=1}^k f_i x_i}{N}$$

Non-Antisocial Group	N = 30
Antisocial Group	N = 30
Male Antisocial Group	N = 18
Male Non-Antisocial Group	N = 18
Female Antisocial Group	N = 12
Female Non-Antisocial Group	N = 12

Standard Deviation:

$$S = \sqrt{\frac{\sum (x - \bar{X})^2}{N}}$$

APPENDIX "J"

Calculation of the Correlations between Means on CPI Scales of the Antisocial and Non-antisocial total Groups and of the Male-Female Antisocial Sub-groups.

Formula:

$$r_{\text{pbi}} = \frac{\bar{X}_p - \bar{X}_q}{St} \sqrt{pq}$$

r_{pbi} = point biserial correlation

p and q = proportions of individuals in the two categories.

\bar{X}_p = Non-antisocial Group

\bar{X}_q = Antisocial Group

St = Standard Deviation of Total Group.

The standard deviation of the total Group was obtained from the formula:

$$St = \sqrt{\frac{1}{N} (n_1 s_1^2 + n_2 s_2^2 + n_1 d_1^2 + n_2 d_2^2)}$$

N = 60

$n_1 s_1^2$ = number and variance of antisocial group.

$n_1 d_1^2$ = number and square of difference between total group mean and antisocial group mean.

APPENDIX "K"

Calculation of the Significance Between Means of CPI Scales of Anti-Social Group and the Non-antisocial Group and Between the Antisocial Male Group and Antisocial Female Group.

$$t = r_{pbi} \sqrt{\frac{n - 2}{1 - r_{pbi}^2}}$$

Total Group: N = 60

APPENDIX "L"

Formula Used for Calculation of Chi Squares.

Chi squares for comparisons of the Marital and Occupational Status between the mothers of the antisocial group and the non-antisocial group were calculated by use of the formula:

$$\chi^2 = \frac{N(AD - BC)^2}{(A + B)(C + D)(A + C)(B + D)}$$

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